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## CONTENTS

	PAGE
Editorial Notes .....	345
Railway Wage Award Problems .....	347
The Docks & Inland Waterways Executive .....	347
Iraqi State Railways .....	348
Indian Main-Line Passenger Services .....	348
International Timetable Conference .....	349
Slump in American Railway Business .....	349
Letters to the Editor .....	350
The Scrap Heap .....	352
Overseas Railway Affairs—Pakistan—South Africa —United States—Italy—France—Yugoslavia—Bel- gium .....	353
Infinitely-Variable R.C. Poppet Valve Gear .....	355
Gauge Conversion in South Australia .....	356
Repairs to Eyemouth Viaduct, Scottish Region Personal .....	360
Winter Train Services .....	363
Memorial Plaque Unveiled .....	365
British Transport Commission Statistics .....	366
Ministry of Transport Accident Report .....	368
Staff & Labour Matters .....	369
Notes and News .....	370
Railway Stock Market and Table .....	372

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THE RAILWAY GAZETTE

33, TOTHILL STREET, WESTMINSTER, S.W.1

## Sterling Devaluation

THE British Government's decision to devalue sterling was not unexpected, but the amount by which the pound was revalued in relation to the American dollar caused surprise. The new rate of 2.80 may prove to be unduly low. In any event it has been a blow to British prestige and, despite the terms in which the announcement was made by the Chancellor of the Exchequer, the seriousness of the crisis which has occasioned so drastic a step must be apparent to all responsible persons. Whether that category will include leaders of the major trade unions in Great Britain seems doubtful. Sir Stafford Cripps's appeal for greater production and for a cessation of major wage claims, which would inflate industrial costs, has not had a good response. The Chancellor was insistent that the need for devaluation had arisen as an alternative to the more normal economic adjustments, which would have resulted in unemployment and the lowering of living standards for the masses of the people. He made no reference to the effect which extravagant administration, and the cost of social services on a scale which the nation patently cannot afford, was having on the British economy. A devaluation of currency cannot be more than a temporary palliative. Unless it is reinforced by greater productivity, a lowering of industrial costs, and an improvement in our overseas competitive position, the last state will be worse than the first. It was a full knowledge of this which induced the Chancellor to plead earnestly with the unions not to make the new financial development a pretext for advancing claims for higher pay.

## Engineers Call for Increased Pay

The Confederation of Shipbuilding & Engineering Unions has put forward a claim for a wage increase which would cost about £100 million a year. The demand is for an increase of £1 a week, and is to be lodged with the employers shortly. The claim was originally proposed at the annual conference last June of the Amalgamated Engineering Union, and has been put forward notwithstanding the calls of the Government for restraint in wage demands and the advice tendered at the Trades Union Congress earlier this month. The claim was announced before the Chancellor of the Exchequer made his latest call for the abandonment of wage claims, but there seems no reason to suppose that Sir Stafford Cripps's plea will be any more effective than those which have preceded it. Sir Alexander Ramsay, Director of the Engineering & Allied Employers' National Federation, has indicated that the employers intend to stand by the Government's policy of curbing wage claims, and has stated that when the obvious need of the nation was to produce more, and to produce more cheaply, it was difficult to understand an application of this kind. He was hopeful that a more realistic attitude would be found when negotiations were opened.

## South African Railways Economy Campaign

In an appeal to railwaymen issued in the form of a special notice, Mr. W. Marshall Clark, General Manager of the South African Railways, refers to the steady deterioration in the financial position of the railways since 1944. Most railwaymen, states this notice, regard the rates equalisation fund as a bulwark to protect the basic conditions of service of the staff, and it will come as a shock to many to learn that this fund, which less than five years ago stood at almost £10,000,000, has now dwindled to less than one-third of that figure. Increased tariffs have failed to bridge the gap between revenue and expenditure and the administration has been compelled to make substantial withdrawals from the fund to balance accounts. If the present rate of loss continues the fund will be exhausted before the end of the present year. The losses are attributed chiefly to greatly increased expenditure on staff and the high cost of materials. From every pound earned, more than 13s. is paid directly in cash to the staff in one form or another, while cost-of-living payments are now more than £18,000,000 a year and the average expenditure for each European member of the staff has risen by about 90 per cent. in the past ten years. Ideas and suggestions as to economies which might be effected are invited from the staff.

### Peak Working at Brighton

Among features brought to light in a general review of the past season's passenger train operation, none has more interest than the arrangements made at Brighton to cope with bank holiday movements. In a sense, this reached its peak on Easter Monday, where a mile-long queue gained publicity. Actually, the arrangements at Brighton were the same then as for Whit Monday and the August bank holiday; and the "mile-long queue" was the result of one of the principal features, *i.e.*, the close co-operation between the Brighton civic police and the station authorities. These bank holiday queues are formed and controlled by the police, and the average rate of movement exceeds 1,000 persons into the station every 10 min. Tickets are inspected in the station forecourt, where the queue is divided into streams to suit main-line, east-line, and west-line destinations. The number of passengers taken away from Brighton Station between 4.25 p.m. and 10.28 p.m. on bank holidays is about 50,000. Between 4.25 p.m. and 9.50 p.m. there are 49 main-line departures, 24 east-line, and 33 west-line departures, or a departure every 3 min. for the whole period, plus a corresponding number of arrivals. Obviously, such a traffic can be worked only by electric traction, and in the 5 hr. 25 min. mentioned, only 8 trains are steam hauled.

### Some Train-Working Curiosities

One of the characteristics of efficient passenger (and goods) operation, keeping the stock continuously on the move, sometimes leads to unusual and unexpected train-workings. Some on the Southern Region have lately come to our notice, but there will be others elsewhere. For instance, the 6.37 a.m. *ex-Eastbourne* terminates at Guildford, whither it runs *via* Tunbridge Wells West and Central stations, Tonbridge, and Redhill. By the same general route there is, in fact, quite a service—two trains each way daily, Mondays to Fridays—between Tunbridge Wells West and Reading. Even more roundabout is the route of the 5.46 Sunday evening train from Reading, which eventually reaches Brighton at 10.12, also *via* Tonbridge. Then there is the 5.45 a.m. *ex-London* Bridge to Ashford *via* Tonbridge and Hastings. It takes 3 hr. 39 min. for the journey, but runs fast between Hastings and Ashford, stopping only at Rye and Appledore. Again, the 1.50 p.m. from Margate runs to Maidstone *via* Ramsgate, Dover, and Ashford in 2½ hr. Most curious of all, however, is the Sunday 7.12 p.m. from Tunbridge Wells West to London. It not only runs *via* Tunbridge Wells Central, and Tonbridge, but is the fastest train from the West station to either London Bridge or Victoria, calling at London Bridge in 1 hr. 7 min.

### Progress of Flood Damage Repairs

Just over a year ago, as was reported in our issue of August 20, 1948, a storm of exceptional severity swept over the Border Country, causing widespread dislocation of rail services on main and branch lines of the North Eastern and Scottish Regions of British Railways. Despite the extent of the damage, however, which on a stretch between Dunbar and Berwick alone resulted in the destruction of seven bridges, the passenger train services over this route were restored by November 1, 1948, about eleven months after the damage was done, this being made possible by the erection of temporary bridges of the military type. These repairs cost something like £300,000, and it has been estimated that the permanent restoration of bridges, etc., work on which has been proceeding during the past twelve months, will cost some £400,000 more. When the permanent bridge girders are in position, the main-line services between Dunbar and Berwick will be freed of the speed restrictions which have been necessary since the floods. Among the bridges damaged was the Eyemouth Viaduct, near Ayton, carrying the branch line from Burnmouth to Eyemouth. Repairs to this bridge have recently been completed and an account of the work is given elsewhere in this issue.

### British Railways Container Service

During the past 20 years there has been considerable development in the design of containers for the conveyance by rail of particular classes of goods. Providing, as they do, means of bulk handling with safer transit as well as door-to-door service, these containers have an important rôle in

helping to solve the main railway problem of transporting a wide variety of goods, perishable or otherwise, from consignor to consignee by the most efficient means and at the lowest possible cost. Already there are in service on British Railways many thousands of specialised types of containers, and, as was reported in our issue of July 29, examples of the latest types were demonstrated recently at Maidenhead (Western Region) and Cricklewood (L.M.R.) goods stations in the presence of M. Jean Levy, President of the International Container Bureau. Four representative types, which are illustrated on page 362 of this issue, concern the transport and discharge by gravity of road making materials, the conveyance of roadstone in complete trainloads from quarry to railhead, bicycle containers fitted with racks to separate the machines in transit, and a prototype container designed for quick-frozen foods, ice cream, medical supplies, etc.

### An Unusual Failure

A summary of Mr. J. L. M. Moore's report on the failure of a large smoke tube on a Southern Region engine when running between Cowden and Hever, Southern Region, on December 7, 1948, appears in this issue. The case was one almost without precedent, he thought, and could be regarded as exceptional, all reasonable precautions having been taken in the light of experience. The circumstances, he said, did reveal certain possibilities making it desirable to review the method of examining such tubes and indicating that sampling might have to be resorted to more freely in future unless some reliable means can be found of determining their condition without disturbing them. Corrosion is a constant worry to the locomotive engineer, and, indeed, under other forms, to his colleagues on the railway generally. Mr. Moore considers every practicable step should be taken to extend the installation of water treatment plants and remove the sources of such anxiety as much as possible.

### Motive Power Progress on the Pennsylvania

All the principal passenger and freight trains east and west on the Pennsylvania Railroad are now worked by diesel-electric or electric locomotives. The Pennsylvania is now the largest operator of diesel-electric locomotives as well as the largest user of steam and electric locomotives. Sixty-three passenger and 82 freight diesels are operating on trains connecting Chicago, St. Louis, Cincinnati, Detroit, and Cleveland with eastern cities, as well as on some shorter runs. The Pennsylvania has put in service 430 diesel-electric shunting locomotives and 19 more are being built. Post-war orders for 145 main-line diesels have been completed, rounding out that part of the Pennsylvania's \$266,000,000 equipment modernisation programme. The remaining 19 locomotives in the \$40,000,000 programme for shunters will be received in a few weeks. The Pennsylvania is continuing its participation in joint research towards the development of a coal-burning gas turbine locomotive.

### Poppet Valve Gears

Poppet valves were used on the L.N.E.R. for the first time in 1927, when Sir Nigel Gresley fitted a Great Eastern "B12" class 4-6-0 engine with the Lenz oscillating-cam valve gear and trials with the engine were sufficiently successful to justify the use of the gear on a further ten new locomotives of this class built in 1928. The next development came in 1929 when two of the none too successful Great Central "Lord Farringdon" class 4-6-0s were equipped with the Caprotti gear, and when the *Cock o' the North* 2-8-2 engine was introduced in 1934, it had poppet valves operated by rotary cam gear. The first of the "Shire" class 4-4-0 engines had gone into service in 1927 and in 1928 six of them were built with poppet valves driven by oscillating cams. The year after, two of this class were equipped with poppet valves operated by rotary cams, and though in this case there were only five cut-off positions in which the engine could be worked, a new series of 40 similarly fitted "D49/2" class appeared in 1932. On another page details are given of a rotary-cam poppet valve gear recently fitted to a "D49/2" engine, in which differential action of the steam cams permits an infinite variation in the range of cut-offs between full gear and mid-gear in each run-

ning direction. A full valve opening to steam is provided at all cut-offs between full-gear and about 12.5 per cent. cut off, while at 10 per cent. cut-off, the valve opening is equal to 90 per cent. of the maximum area through the valve.

### Railway Wage Award Problems

THE rejection of all the major wage claims put forward by the National Union of Railwaymen, recorded in our last week's issue, has raised problems both for the trade union leaders and for the Government. The report of the Conciliation Board, which heard the men's claims, was quite clear on the point that the existing finances of the railways could not bear a new wage increase, and that it would not be possible for any material advance to be met out of the general finances of the British Transport Commission. It also found that there was no evidence to support the suggestion of the N.U.R. that the present financial position was temporary. When it commented that an increase in wages could be met only by a general rise in fares and rates which did not bring about a further fall in business, it added that the existing levels of charges, given present circumstances, were already discouraging traffic by rail, and that a substantially higher level would make the position worse.

The reaction of the men to the report was unfavourable. That was to be expected, just as the findings in the report itself should have caused no surprise. Unfortunately, however, the attitude of the N.U.R. Executive in persuading the men that if they were sufficiently obturate in their demands they could expect to force concessions from the railways, notwithstanding the known financial position, has fostered expectations which it is difficult to dissipate. In the result there has been a good deal of unrest among the railwaymen since the issue of the Conciliation Board's report. Working to rule and threats of token strikes have occurred in various areas. Details of the various developments which have occurred are given in our Staff & Labour Notes on another page.

The Conciliation Board's decision, by its sheer logic, has raised problems both for the trade union leaders and for the Government. It is recognised by both that the present temper of the railwayman may lead to awkward developments. There can be no dispute that much of the present unrest has its roots in the faulty leadership of the N.U.R. Members of that union have been incited over a long period to press wage claims in defiance of Government appeals for restraint, and of the known economic position of the railways. The negotiations have been handled clumsily; belligerency is no good substitute for diplomacy. The refusal of the trade union leaders to accept the offer which, although small in individual amounts, was generous in the light of the railway position, the Railway Executive made earlier in the negotiations in an attempt to improve the lot of the lower paid men, has made the position of the Railway Executive clear. It agreed to accept the findings, whatever they might be, of the Conciliation Board. It has already announced its intention to implement the minor concessions which the Conciliation Board recommended for certain selected grades. There is no reason in logic or equity why it should go further. It has the backing of the Government wages policy to sustain it, and this recently has been reinforced by the Chancellor of the Exchequer's further appeal for restraint in wage claims.

The trade union leaders, who also agreed to accept the findings of the Conciliation Board, can take what comfort they may from the fact that they also have allied themselves with the Government policy on wages and incomes, and that on the eve of the issue of the Conciliation Board's report they had voted in support of it. Their responsibility to their members is clear. They must persuade them of the correctness of their own convictions. It is a testing time for the powers of leadership and management of the N.U.R. Executive. That body has been among the foremost to call for a greater measure of workers' control in management. An opportunity is now afforded of displaying its administrative ability in its own sphere.

The Government's stand in the matter should be plain. The Conciliation Board was its own creation. The dispute which exists is between railwaymen and the Railway Executive. There can be no grounds for intervention. To do so would be to cut the ground from under the feet of the Minister's

Board of Conciliation, and, if that intervention were to result in any concessions being made to the men, it would undermine the whole basis of industrial conciliation, and would let loose a flood of wage claims, which in present circumstances would negative the whole Government policy in this matter.

In the current issue of *The Railway Review*, the organ of the N.U.R., special prominence is given to an article on wages, in which the suggestion is clearly made that some improvement in the conditions of the lower paid workers might be acceptable to men in other categories. "We do not believe that the better-paid, although certainly not well-paid, members of the N.U.R. will pursue a dog-in-the-manger policy," says the article, and the writer, giving a "personal view," appeals to the railwaymen to postpone an all-in claim in favour of an increase for the lowest paid union members. Mr. Figgins has stated that the article does not represent the policy of the union, but its appearance at the present time may have some significance.

### The Docks & Inland Waterways Executive

THE former railway companies had about £72 million invested in docks, harbours, and wharves, which represented about 30 per cent. of the country's dock accommodation. Before the war, gross receipts amounted to £6,700,000 a year and expenditure to £6,100,000, or thereabouts. For the five years 1934 to 1938 net receipts averaged £662,000; only in 1937 was there a return of over 1 per cent. on capital. The companies recognised that docks did not often pay by themselves, but were a valuable means of creating remunerative railway traffic. The railway-owned docks, except those styled "packet ports," are being transferred gradually from the control of the Railway Executive to the Docks & Inland Waterways Executive. In 1948 the South Wales Docks were handed over and the bulk of the reorganisation should be carried out in 1949 and 1950.

When the changeover in management is completed, the Docks Executive will be judged by the reduction it can make in last year's deficit of £1,329,000. The British Transport Commission's report says plaintively that "on a capital investment recorded in the books at some £72,000,000 plus net current assets, a surplus on working account sufficient to cover at least some contribution towards remuneration and redemption of capital is to be expected." Apart from the Southern and South Western group of docks, which produced net receipts of £344,000, the only group with a surplus was the North Eastern, whose coal shipments of 9,850,000 tons were far above those at the Humber, South Wales, and Scottish ports. Future results will depend largely on expansion of coal exports. The total tonnage handled at all the coal shipping places last year was 18,000,000 below the 1938 figure.

The Docks Executive will be able to do less than the railways did to influence traffic through particular ports. It will have to bear the entire cost of many things which the railway management did without charge for the benefit of their dock estates. There were distinct advantages in having the railway and dock working under a common control at a number of places in addition to the "packet ports." These advantages will be lost in future, and there seems bound to be an increase in administrative costs. An increase in dock dues and charges to meet the growing expenditure would be opposed strenuously by traders and shipowners.

The outlook for the Inland Waterways branch of the Executive's functions is equally unpromising. In 1948 the management of canals taken over showed a deficit of £75,000. The Executive was saddled with further losses of £22,500 on the Caledonian Canal and £10,500 on the Crinan Canal—two waterways which have been a charge on the Exchequer for years. Soon the Railway Executive will hand over canals on which it lost £118,000 in 1948, so that the Inland Waterways Executive will be in control of undertakings which were £224,000 short of an operating revenue. There was yet another deficit of £66,000 on carrying operations. The tonnage of traffic originating was only 11,231,000, of which roughly one half was coal, coke, patent fuel and peat. Between 1905 and 1938 the tonnage fell from 42 million tons to 13 million. There is little prospect of the pre-war traffic being exceeded at an early date and still less likelihood of the State-owned canal system becoming self-supporting.



### Iraqi State Railways

THE report of the Iraqi State Railways for the year ending March 31, 1948, describes also the rapid growth of the ancillary Iraqi Airways, and progress in major engineering works. The railway system of 966 route-miles comprises the metre-gauge sections from Baghdad West to Basra, and from Baghdad East to Kirkuk, with their branches, and the standard-gauge section from Baghdad West to Tel Kotchek, where connection is made with the Syrian, and through them with the Turkish, Palestine, and Egyptian railways.

The following are the more important results:—

	1946-47	1947-48
<b>Railways</b>		
Train-mileage ... ..	2,766,555	2,939,419
Passenger-journeys ... ..	4,300,413	3,725,463
Goods ton-miles ... ..	372,909,447	345,870,115
	Iraqi dinars	
Coaching receipts ... ..	1,039,466	876,534
Goods receipts ... ..	1,936,065	2,313,265
Miscellaneous receipts ... ..	23,028	36,126
Total revenue from operation ... ..	2,998,559	3,225,925
Working expenses ... ..	2,756,206	2,988,024
<b>Airways</b>		
Passenger-journeys ... ..	6,386	12,397
Revenue ton-miles passengers, baggage, mails, and cargo) ... ..	199,521	439,264
	Iraqi dinars	
Revenue ... ..	89,130	186,580
Expenditure ... ..	133,720	187,600

Iraqi Airways began to operate in January, 1946. The progress made since then is considered satisfactory. During the period under review, services were operated within Iraq, and also to destinations such as Beirut, Cairo, Karachi, and Teheran, and arrangements were made for a monthly service with "Viking" aircraft from Baghdad to England, and a weekly service to Ankara and Istanbul. Iraqi staff were trained, additional aircraft acquired, and workshops improved. Iraqi Airways maintained its active membership of the International Air Transport Association, British Overseas Airways Corporation continued to act as technical advisers.

Work continued on the 70-mile metre-gauge extension of the line north-west from Kirkuk to Erbil, all formation work by contract being completed. Flood-protection works were carried out on the Baghdad to Basra and Kirkuk lines. Progress was made with the road and (metre-gauge) rail bridge over the Tigris to link Baghdad East and West stations, and with the new Euphrates bridge on the metre-gauge Kerbala branch. The foundations were laid of the new Baghdad terminus, described in the October 22, 1948, issue of *The Railway Gazette*.

The sale locally of surplus military road transport vehicles resulted in serious competition and loss of both passenger and goods traffic. Revenue, however, was maintained as a result of heavy post-war imports of general merchandise and increasing traffic for the oil companies. The booking of in-

ternational passenger and goods traffic via Tel Kotchek was interrupted by an outbreak of cholera in Syria and Egypt; tonnage booked to Syria, however, increased as compared with the previous year. The "Taurus Express" continued to run through between Baghdad, Ankara, and Haydarpasa, where connection is made across the Bosphorus with the "Orient Express" from Istanbul; this route did not play its proper part as a link between Iraq and the west, owing to the restrictions imposed on rail travel through Eastern Europe.

\* \* \*

### Indian Main-Line Passenger Services

THE July, 1949, issue of *Indian Bradshaw*, which gives services both in India and in Pakistan, shows the effects of partition on railway travel, and the slow reversion of passenger services to peacetime schedules. In the table below, July, 1949, timings are compared with those of July, 1945, when Indian railways were subject to an intense strain immediately before VJ Day, during preparations for launching the Allied assault on Malaya. The distances are those given by *Indian Bradshaw*.

No inter-Dominion passenger service now is advertised between India and Western Pakistan. Long-distance services from Bombay, Calcutta, and Delhi terminate at Amritsar, the last important station in India; the principal main line of the North Western Railway of Pakistan, which formerly was shown as Peshawar to Delhi, now is shown as Peshawar to Karachi, between which latter places two pairs of trains run daily via Rawalpindi and Lahore, the "Pakistan Mail" and the "Pakistan Express." Services on the Jodhpur Railway which formerly linked Rajputana and Western and Central India with Sind, now terminate in the Thar desert, and the western (Pakistan) portion of this metre-gauge line is now part of the N.W.R., passenger trains similarly terminating in the desert.

With Eastern Pakistan, however, due to its economic ties with Calcutta and Western Bengal, through services are shown, if on a reduced scale. The "Darjeeling Mail" and "Assam Mail" give through services with Calcutta, with transit through Pakistan territory. Whilst no allusion is made to any frontier formalities, these seem to be implied by increases in the length of stops on both sides of what are now the Indo-Pakistan frontiers.

Air-conditioned coaches continue to run in certain principal passenger trains. Mention of restaurant-cars is made only in some instances, but it seems that they run in a considerable number of mail and express trains, and that restaurant cars which formerly served European meals only, now serve Hindu and Mohammedan meals as well, as for some years has been the case in the "Grand Trunk Express" between Delhi and Madras. Few place-names have been changed, only Kanpur (Cawnpore) and Mathura (Muttra) being conspicuous; Calcutta

Railway	From	To	Miles	Time		Remarks
				1945	1949	
				Hr. Min.	Hr. Min.	
<b>India</b>						
G.I.P., E.I. ...	Bombay Victoria ...	Calcutta Howrah ...	1,349	43 05	41 15	Via Jubbulpore.
G.I.P., B.N. ...	Bombay Victoria ...	Calcutta Howrah ...	1,223	43 40	41 20	Via Nagpur.
B.B.C.I. ...	Bombay Central ...	Delhi Junction ...	861	26 05	26 50	"Frontier Mail." Before Partition, ran through to Lahore and Peshawar on N.W.R.
G.I.P., M.S.M. ...	Bombay Victoria ...	Madras Central ...	794	29 10	29 45	"Madras Express."
G.I.P. ...	Bombay Victoria ...	Poona ...	119	3 00	3 10	"Deccan Queen." Electrically worked throughout.
E.I., E.P.* ...	Calcutta Howrah ...	Amritsar ...	1,143	41 37	40 15	Via Lucknow. "Punjab Mail." Before Partition, ran through to Lahore.
E.I. ...	Calcutta Howrah ...	Delhi Junction ...	902	28 55	25 50	Via Kanpur (Cawnpore).
B.N., M.S.M. ...	Calcutta Howrah ...	Madras Central ...	1,032	40 35	41 20	Via Waltair.
E.I.,† E.B., Assam	Calcutta Sealdah ...	Tinsukia (Assam) ...	798	45 00	45 30	Via Parbatipur and Pandu. Includes break of gauge (Parbatipur), Brahmaputra ferry (Amingaon—Pandur), and since Partition, transit of Pakistan territory.
G.I.P., N.S., M.S.M.	Delhi Junction ...	Madras Central ...	1,361	51 10	47 05	Via Itarsi, Nagpur, and Bezwa. "Grand Trunk Express."
S.I., C.G. ...	Madras Egmore ...	Colombo Fort ...	650‡	36 20	35 15	Includes immigration, etc., formalities, and Palk Strait crossing 2 hr. 20 min. (Dhanushkodi—Tala Mannar).
<b>Pakistan</b>						
N.W. ...	Karachi City ...	Lahore Junction ...	755	26 30	24 30	

\* Eastern Punjab Railway since Partition, formerly North Western Railway

† East Indian Railway (Sealdah Division) since Partition, formerly Bengal Assam Railway, together with present Eastern Bengal (Pakistan) and Assam (India) Railways

‡ Approximate distance



and Lucknow retain their anglicised forms; and wayside stations such as Colonelganj and McDonald's Choultry continue as reminders of the British connection.

### International Timetable Conference

AS a result of an invitation extended by British Railways at the plenary session of the International Timetable & Through Carriage Conference held in Krakow, Poland, last year, arrangements are being made for this important railway conference to meet in England this year. The last occasion on which the conference took place in this country was in 1931, when delegates representing railways in most of the countries of Europe attended. The meeting place for the 1931 conference was the Hotel Great Central at Marylebone—now the headquarters of the Railway Executive. Delegates to the International Timetable & Through Carriage Conference this year will meet at Brighton from October 5 to 15 inclusive and meetings will take place in the Royal Pavilion.

The International Timetable & Through Carriage Conference is held in October each year in a different country, and all European railway administrations to, or through, whose system international trains operate, are parties to the conference. Decisions in regard to the services to operate during twelve months (May to May) are agreed during the various meetings between the delegates, and arrangements are made for the running of international services and revised or new services to particular resorts, districts, and so on. It is expected that special arrangements will be agreed this year for the running of trains in connection with Holy Year in Rome and the Passion Play at Oberammergau, for which events many people from different countries may travel to the Continent next year. It is usual for the various railway administrations to review the current year's traffic arrangements before the conference, so that difficulties which have arisen may be overcome as far as possible, and accelerations effected in the services.

During the conference, meetings of the interested railway administrations are convened to discuss timetable and through carriage arrangements, Customs formalities, etc., in connection with the running of principal international expresses, such as the Simplon-Orient Express, Orient Express, Arlberg Express, Nord Express, and so on. The managing administration for the Simplon-Orient Express, which traverses six countries to and from Turkey, is the Société Nationale des Chemins de fer Français. Another important international express, the Orient Express, is also managed by that railway. The Arlberg Express and Nord-Express are managed by the Swiss Federal Railways and Belgian National Railways respectively. Meetings concerning the Simplon-Orient Express are usually attended by delegates from eighteen administrations (including those representing the Syrian, Israeli, and Iraqi railways) and the Compagnie Internationale des Wagons-Lits.

Delegates from railways on the other side of the Bosphorus are interested in the discussions concerning the running of the Simplon-Orient Express, so that timetable arrangements may be decided for the Taurus Express which operates from Haydarpasa to such places as Aleppo, Baghdad, and so on. The running of these international expresses to and from the countries of Europe and Asia presents many problems, chiefly in regard to the arrivals and departures at frontier stations, and careful consideration has to be given to the timing of trains over the lines of each administration. Decisions arrived at during the deliberations are carefully noted and communicated by the delegates to their operating departments, and timings agreed at the conference are afterwards indicated in the timetables of each railway applicable from the following May.

The through-carriage side of the conference entails a considerable amount of work, and decisions are made as to the provision of carriages, sleeping cars, baggage vans, etc., and arrangements for cleaning vehicles. The Compagnie Internationale des Wagons-Lits et des Grands Express Européens, whose sleeping cars and restaurant cars operate on most of the European railways, are also represented, and the provision of wagons-lits and wagons-restaurant is usually arranged in accordance with the timetables fixed at the discussions.

British Railways delegates will discuss with the European delegates various questions affecting the services to the principal resorts on the Continent frequented by British travellers.

The augmentation of services to such countries as France, Switzerland, Italy, Austria, Belgium, and Germany, to which many people from Great Britain are expected to travel in 1950, will be necessary, and also the revision of existing services to cover traffic requirements. Passenger traffic to and from the Continent by British Railways routes during the summer of 1949 has been considerable and special arrangements will require to be made to deal with the heavy traffic expected for next year.

The operation of services to and from the winter sports resorts on the Continent, and winter services generally, have also to be taken into consideration, as the decisions arrived at during the annual conference cover both summer and winter. Delegates of the railways dealing with rolling stock matters thus know six months in advance what number of through vehicles are to be provided to meet the year's requirements for the services fixed.

Delegates from railways in Belgium, Bulgaria, Denmark, France, Great Britain, Spain, Finland, Greece, Holland, Italy, Luxembourg, Norway, Austria, Poland, Portugal, Roumania, Sweden, Switzerland, Czechoslovakia, Turkey, Hungary, U.S.S.R., Yugoslavia, and Germany, and from railways on the eastern side of the Bosphorus, are expected to travel to Brighton for the 1949 conference.

At the invitation of British Railways, delegates and their wives will meet at the Hotel Metropole for dinner on October 12, and excursions and entertainments will also be arranged for the wives of visiting delegates.

### Slump in American Railway Business

AT the beginning of August the financial results of the U.S.A. railways for the first half of 1949 were announced—a month before the report of the British Transport Commission on its 1948 operations was published—and the figures for the June half-year confirm the opinion expressed in several recent issues of *The Railway Gazette* that America was in the throes of a serious setback in industry and transport. Railway operating revenue decreased from \$4,607 million in 1948 to \$4,369 million. This fall of 5 per cent. in revenue went with a reduction of only 2.5 per cent. in expenses from \$3,649 million to \$3,555 million. The operating ratio rose from 79 to 81 per cent. After taking taxes and rents into account, net railway operating income dropped from \$411 million to \$313 million, or 23 per cent. Finally, net income, i.e., earnings after fixed charges, was reduced by rather more than a third from \$262 million to \$173 million. The Union Pacific, the Chicago & North Western, and 18 other class 1 roads failed to earn any net operating income.

At the time of writing there is no distinct sign of a turn in the tide. Industrial production in the States was slightly higher in August than in July, but in the week ended August 20, railway wagon loadings were nearly 19 per cent. below the 1948 and 1947 numbers. For the 33 weeks to August 20, wagon loadings numbered 3,247,000, or 12 per cent. fewer than in the corresponding period of 1948, and were 4,218,000, or 15 per cent., below 1947. The loss of less-than-wagonload traffic is about 14 per cent. each week from 1948 forwardings and over 20 per cent. from 1947. The railways cannot cope with road competition for the carriage of "smalls." The number of interstate road hauliers has doubled since 1939 and the amount of their takings has quadrupled. In self-defence, some railways have improved transit times by using road motor vehicles over wide areas for the collection and delivery of goods, but these experiments affect only a tiny fraction of the total freight tonnage.

Since the war, the railways have spent money freely, but are now striving to economise. To save staff, many operating and engineering processes are being mechanised, and some maintenance of equipment will be deferred. By the middle of July, the number of employees was 11 per cent. less than in July, 1948. The portents are that the present year is going to be one of the most difficult in the history of the U.S.A. railways. Canadian railways also are suffering from the contraction of business. For the 32 weeks to August 13, they loaded 79,000 fewer wagons than in 1948, a decrease of 3.3 per cent. The number of wagons received from connecting railways declined by 188,000, or 16 per cent., in the same period.

## LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

### Passenger Fares

19, Ingram Way,  
Greenford,  
Middlesex. September 6

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Having been profoundly impressed by the painstaking ability of Mr. G. H. Laundy, in your September 2 issue, and various correspondents to pick their ways through the labyrinthine catacombs of passenger fares, I am timorously tempted to suggest that we stick a more expensive stamp on our National Insurance cards and travel *ad lib.* and unmolested on British Transport.

All in favour?

Yours faithfully,

A. G. P. SAGE

### Suits of Solemn Black

32, Russell Road,  
London, W.14. September 12

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—I hope I may be allowed to add my support to the letters appearing in your issues of June 10 and July 15, urging the repainting of the Southern Region "Schools" class 4-4-0s in green livery, instead of the depressing black paint.

The performance of these locomotives has entitled them to a place in the very front rank of British engineering achievements, not through any particular novelty in design, but through sheer ability to do hard tasks extremely well—work, indeed, which one would normally assign to a 4-6-0. Mr. Townroe has written a book about this class and some of the magnificent performances of individual engines in it; and Mr. Nock has described some of their brilliant feats in his contributions to technical discussions at the Institution of Locomotive Engineers (where he observed that no matter how they were handled, they were able to put up a splendid show), as well as in his book "British Locomotives at Work."

If those responsible for decisions about the painting of locomotives are unaware of the considerable degree of public interest in these machines, and of public awareness of their capabilities, surely they would reverse the order for painting them black and take advantage of their extremely high publicity value in keeping alive goodwill in the Southern Counties. In these days of adversity, the railways ought never to let go a chance like this to enhance their prestige and enlist public interest.

Yours faithfully,

W. O. SKEAT

### Railway Standards

4, Victoria Gardens,  
Cotham, Bristol, 6. September 12

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—While deploring the general low standard of cleanliness of locomotives in this country—as commented on so frequently in recent issues of *The Railway Gazette*—I do feel that it might be a good thing if credit be given where it is due, and most certainly it is due to the staff at Bristol L.M.R. depôt.

It seems to me, as a recent regular L.M.R. traveller in Bristol, that there is hardly a single engine here which one would call dirty—even amongst the freight stock—and the Class 5 mixed traffics are far superior to most, if not all, of the visiting engines of the same class. The 5's are, indeed, very nearly on a level with the 5X's here, and these are a real delight to see in these days—not only is the paintwork glistening, but it seems quite the rule for buffer heads, valve gear, etc., and even the smokebox handles and handrail, to be thoroughly burnished.

Engine No. 45699 deserves individual mention. Although repainted in B.R. black livery some months ago, one would imagine her to have left the paint shops only yesterday. But she is not an exception—such a standard seems the rule at this depôt. How different are the engines from further north—how disgustingly different too are the neighbouring "Castles" at Bath Road!

Last week Class 5, No. 44843, until recently a very smartly kept Bristol engine, appeared in a shocking condition—her lining out was obliterated in parts by grime, and her smokebox door was rusting. I was astounded by this sudden lapse—but the reason was soon all too apparent. She now carries a 20A shed plate.

Strangely enough, about the same time, I saw the Caprotti

Class 5 No. 44745 in a much cleaner condition than usual. By no small coincidence her shed plate is now a Bristol one. Leeds is not the only L.M.R. depôt which sends dirty engines out on important trains. Derby, too, seems as bad.

Although I appreciate the difficulties—and I suggest that the quicker turnaround of engines these days is a big factor detrimental to cleanliness, a problem which I grant is difficult to overcome—nevertheless the foregoing surely indicates that something can be done to keep engines clean; if staff is short, surely it is still reasonable to expect some engines to be clean at least some of the time.

Yours faithfully,

G. A. KNIGHT

### A Veteran Express Locomotive

42, Fordwich Road,  
Welwyn Garden City,  
Herts. September 13

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—In your issue dated August 19 it was a pleasure to see a photograph of that Western Region veteran, No. 4007 *Swallowfield Park*, on the turntable at Paddington.

I believe this must be one of the oldest, if not the oldest, engine belonging to British Railways which is still engaged on top link main-line duties. It is often called on to deputise for "Castles" stationed at Worcester shed, and one of their turns involves working the heavily-loaded 4.45 p.m. down Worcester express, which is allowed 158 min. for the distance of 120½ miles, inclusive of three stops.

Forty-two years spent in continuous main-line express train service is, I should imagine, a record for any locomotive in this country. Furthermore, it is a great tribute to the designer, especially when it is remembered that No. 4007 is still running in the same form as when first built, apart from one or two very minor modifications.

Is it too much to hope that the Western Region authorities will permit No. 4007 to celebrate half a century of main-line express train working?

Yours faithfully,

J. S. WHITING

### Future of the Rural Branch Line

68, Gordon Street,  
Glasgow, C.1. September 13

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Much of the recent correspondence in your columns on branch-line services seems to treat of them more as interesting curiosities than of their use to the locality. In very many cases, too, the present services have hardly progressed since the days when the railways held the monopoly before the motorbus was thought of, and the timings, speeds, and frequency are almost the same as in 1914.

The passenger revenue from branch lines and local main-line services is mainly from tickets to and from the local market town, and the only way to attract and retain traffic is to have regular, fast, and reasonably frequent trains. The services ought, therefore, to be recast to give a regular hourly or, at least, two-hourly service, as the motorbus does, without regard to main-line express connections. They should be provided by rail motor cars, steam or diesel, or push-and-pull trains, and the operating costs for such services would be little higher than with the present meagre timetable, as the actual cost of keeping a train set in motion is minute in proportion to the overheads and wages which must be paid whether trains are few or many.

The fitting in of local trains on main lines and junction and station occupation would require careful thought, but neither difficulty should prove insuperable. There are, of course, certain branches which are not a paying proposition in any circumstances where the motorbus offers a much shorter journey by possibly a more direct route, or where the flow of traffic has changed its direction.

It should be practicable nowadays to reduce costs by cutting out station staff and reducing signalling requirements. At many small stations it is surely unnecessary to keep any staff. Tickets could be issued by the guard, as in buses, and parcels traffic handled through a lock-up at the station to which the guard and a local parcels agent had access. In fact, is there any reason, either, why goods traffic could not be handled in the same manner through the same agent and a travelling shunter on the goods train?

In regard to signalling, I doubt if the present elaborate tablet and token systems are really necessary for safety or any other reason on many branch lines, and would suggest that a large number could be safely worked on the "one engine in steam" system over long sections, or by the over-

seas methods of train control or despatching by telephone or teleprinter. I know one branch which has five block sections in a length of 17 miles, but only two crossing places. Admittedly, there is a special emergency reason for this, but that is little excuse for keeping them all permanently in use.

The committee of the Railway Executive to consider closing unremunerative branches is by all accounts at present gathering evidence. It would be interesting to know what sort of evidence it is interested in, and to what extent it is taking the views of the local inhabitants, seeing how little real effort is apparently made by the railways now or in the past to improve local services to regain traffic lost to the road.

Yours faithfully,

H. L. HAWKER

## Huddersfield and Bradford Train Services

33, Chelwood Gardens,

Kew Garden, Surrey, September 14

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I have been interested to read the remarks of your correspondents in issues of *The Railway Gazette* dated July 1 and August 26 on the deficiencies of the train service to Huddersfield and Bradford.

May I take up the argument from the London end, for there is little doubt that a considerable number of business journeys take place to these two important industrial centres, and the very meagre supply of through trains is anything but convenient? Even if one allows that express journeys must, of necessity, still be slower than pre-war, it would not be unjustified to ask if some improvement could be made to the above West Riding towns, where the existing through trains are 35 to 55 min. slower as compared with their 1939 equivalents.

This brings me to the question as to why the recognised main-line service from Marylebone terminates at Manchester. When the Eastern Region, or L.N.E.R. Great Central Section as it then was, ran a 4½-hr. schedule from Marylebone to London Road, it could be said to have competitive value with the Euston route, bearing in mind its Midland connections, but today the Eastern Region timings between London and Manchester are mostly 5½ hrs., with one exception, the new 11.30 a.m. from London Road. On present timetables, Euston timings to Manchester are about 4 hr. 20 min., whilst better timings to the same destination from Rugby and Leicester are available over L.M.R. metals than on the old G.C. route.

This all suggests to me that no harm, and a considerable amount of good, would be done by making Bradford the main terminal from Marylebone, and at the same time providing

good connections to Manchester at Sheffield, or perhaps at Nottingham in some instances. Additional weight must surely be forthcoming to this argument when the Sheffield-Manchester electrification is completed, for if expresses from Marylebone were terminating at Bradford no change of locomotive would be necessary at Sheffield.

From a business man's point of view, an early train is badly needed to the Midlands and the West Riding, and I would suggest an express from Marylebone at 8.15 a.m., calling at High Wycombe, Rugby, Leicester, Nottingham, Sheffield (arriving at 11.50 a.m. to connect with the 12.05 from Lincoln to Manchester), then fast to Huddersfield, arr. 12.45 p.m., and Bradford, arr. 1.20 p.m. This train could do a return journey to London (reinstating the old 5 p.m. from Bradford), again via High Wycombe, and arrive Marylebone about 9.50 p.m.

Much could be done over the old Great Central metals to improve train services to South Yorkshire from the Midlands and South; it is the shortest route from most places, and, from a passenger train point of view, has the most scope for additional services. The permanent way is good, and, except for the pitfall slacks between Sheffield and Nottingham, has some long stretches where high speeds can be maintained.

Few enthusiasts will forget the inspiring runs of just over four hours to Huddersfield which were a feature of Marylebone timetables before the war, and, from my experience, these trains were seldom late.

Yours faithfully,

S. J. H. DYSON

## Rudyard in Blunderland

9, Keble House, Manor Fields,

Putney, S.W.15, September 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It is regrettable that a slight literary lapse should have marred an otherwise excellent editorial note on page 258 of your September 2 issue.

For "Kipling's dictum," kindly read "'Alice' aforethought." R.K. was probably not averse from plagiarism—a trait he would have shared with an illustrious company. Be that as it may, I must insist that Humpty Dumpty said it first. His *ipissima verba*, by the way, were:

"I said it very loud and clear;

I went and shouted in his ear."

Yours truly,

J. E. L. SKELTON

## Publications Received

**Payne's Carriage of Goods by Sea.** Fifth edition. By John Samuel-Gibbon. M.A. London: Butterworth & Co. Ltd., 4-6, Bell Yard, Temple Bar, W.C.2. 8 in. × 5½ in. 173 pp. Price 15s. net.—In view of the many maritime activities of British railways during the past hundred years, railway ships and ports seem to have been little involved in the more important legal cases bearing on the law of carriage of goods by sea; nor do the peculiar circumstances of train ferries seem to have given rise to any crucial litigation. This standard text-book, however, should be of value to any beginner in the study of the law of transport. The author points out that changes in the law during the eleven years since the previous edition are few, and that many judicial decisions in cases which have arisen out of the war must fall outside the scope of a preliminary treatise.

**Lock and Quay.** Vol. I, No. 1. September, 1949. London: The Docks & Inland Waterways Executive, 22, Dorset Square, N.W.1. 9 in. × 7 in. 17 pp. Price 3d.—In an editorial message to the first issue of this staff magazine, Sir Cyril Hurcomb, Chairman of the British Transport Commission, comments that publication follows fittingly on the bringing together in one organisation those employed in the canal undertakings and in the trade harbours taken over from the former

railway companies; he expresses confidence that by stimulating discussion and spreading news the magazine will help employees to appreciate the importance of their work. Sir Reginald Hill, Chairman, Docks & Inland Waterways Executive, in a further editorial message, stresses the value of the magazine as a means of circulating information on work in all parts of the organisation. It is intended to cover the various activities of dock and canal, with articles, illustrations, social, sports and staff news, and it is hoped to include related transport topics, particularly those concerned with the British Transport Commission and other Executives. Two of the principal features of the first issue are entitled "Round the Ports" and "Round the Waterways," and deal with a number of general and staff topics in the ports and canal divisions. A variety of tastes has been catered for with short articles on the South Wales ports and the compartment boat service operating in the North Eastern Division, as well as book reviews and a page of humorous topics relating to dock and canal.

**British Standard for Unified Screw Threads (B.S. 1580:1949).** London: British Standards Institution, Sales Department, 24, Victoria Street, S.W.1. Price 7s. 6d., post free.—In December last the signature was announced of a Declaration of Accord between Great Britain, the U.S.A. and Canada concerning a unified screw

thread system. The agreement represented the culmination of discussions extending back over thirty years, and resolved differences in screw thread design which have existed for nearly a century. Since last December, the final technical details have been completed in the preparation of the national standards. The British and American Standards have recently been published, and the Canadian Standard is to be expected shortly. The present specification is issued at this stage as a provisional British Standard. It is intended that, at the end of six months, it shall be reviewed, so that it may be confirmed as one of the series of British Standards for screw threads.

**Steel News.**—The British Iron & Steel Federation has issued the first number of *Steel News*. This monthly illustrated bulletin is concerned with current achievements and developments in the industry. It is claimed that for many years the public has been provided with a fuller and wider range of statistical information about iron and steel than about any other comparable industry and that this new publication represents a further step in this policy. It is designed to give this information in a simpler and more popular form. There is no copyright in any of the material appearing in the bulletin. Enquiries concerning *Steel News* should be addressed to the Information Office, Steel House, Tothill Street, London, S.W.1.



## The Scrap Heap

Awards for safe driving on the road have been made to 4,046 horse and motor drivers of the London Midland Region of British Railways, a total which exceeds the previous year's figure by 1,582. The awards are for the 1948 Safe Driving Competition organised by the Royal Society for the Prevention of Accidents. Other centres where London Midland Region road drivers have secured high awards are Birmingham, 382; Leeds, 370; Leicester, 198; Liverpool, 321; London, 665; Manchester, 641; Stoke, 247.

### 100 YEARS AGO

From THE RAILWAY TIMES, Sept. 22, 1849

**ASSURANCE OF RAILWAY TRAVELLERS.**—During the week the new system of insurance against accident by railway has come into operation on the Eastern Counties Railway, the Caledonian, North British, Edinburgh and Glasgow, and Chester and Holyhead Railways, and is about being extended to Ireland. The Post-office and other Government authorities are promoting it amongst those of their officers who travel by railway, and since the establishment of the system on the English railways, French actuaries have been over with a view to its investigation, and its adoption on the French railways.

### MR. VAUGHAN PRAISES B.R.

"The railroad world will admire the remarkable way in which the British railways have restored normal operations after the tremendous damage and dislocation of services suffered during the war," said Mr. R. C. Vaughan, Chairman & President of the Canadian National Railways on his return to Canada from a visit overseas. British transport problems are not dissimilar to those in Canada, according to Mr. Vaughan. The British railways are experiencing difficulty in obtaining new

equipment and they have not been able to do as much as they want in the way of modernising passenger rolling stock.

### "ONE TANK OF WATER"

The ticket reproduced, authorising the delivery of one tank of water to a G.N.R. engine driver, was issued by the late Sir Nigel Gresley. The station is shown as "Batt"—presumably an abbreviation for Battersea, which, of course, was not on the G.N.R. It seems that these tickets were issued for accounting purposes when engines had to replenish their tanks on other companies' systems.

### CRICKETS PLEASE

To soothe weary train travellers officials at Osaka Station have begun relaying over the public address system the sounds of crickets and grasshoppers. The intervals between train announcements are filled with the chirping of insects in a cage placed in front of the microphone. The idea was put forward by three students from Central Japan who sent the 50 choristers to the stationmaster.—*Reuters*.

### NON-STOP

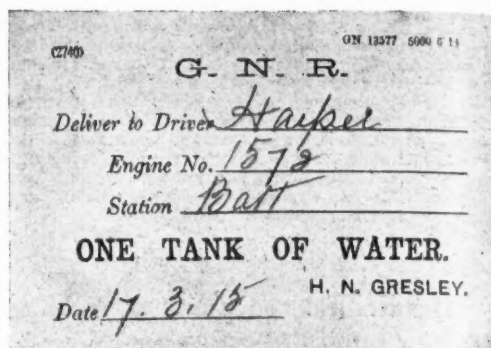
In the current issue of the *Railway Review* appear the comments of Mr. J. B. Figgins, General Secretary, N.U.R., on the recent report of the Board of Conciliation.

His first sentence consists of 99 words. His second runs to 54 and his third to 76 words. In his prose, at any rate, as someone observed recently, Mr. Figgins does not hold with stoppages.—*Peterborough* in "The Daily Telegraph"

### On the "Enterprise Express" G.N.R.(I)



Reproduction of a drawing by Pyke of the cocktail bar, presided over by Mr. Joseph Kearns, Principal Dining Car Attendant, which is a popular feature of the Dublin-Belfast non-stop train, the "Enterprise Express"



### AN UNEXPLAINED DESIRE

None but a man of the strongest character can remain unmoved in the presence of a fellow creature consulting a railway timetable. The ordinary man, common and kindly, itches to snatch the *Bradshaw* into his own hands, and to demonstrate his skill in plotting a cross-country journey. I have never heard any plausible explanation of this strange passion.

I am not thinking of those unnatural men—women are untouched by such lunacy—who delight in train-tables for their own sake and can tell you on the instant your connection at Basle or Tectshen or Bologna. The nearest I ever came to positive pleasure in a timetable was when it beguiled the tedious intervals of war. It was amusing, after a sad and wistful fashion, to plan visits in England to friends in the shires.

It is not because we ordinary men are particularly good at looking out trains that we find it so difficult to restrain our impulse to proffer assistance—I have felt it even in the presence of a hall-porter in a Balkan capital. Nor is it related to what may seem a kindred condition in those who long to help a tourist on his way.

I never see a foreign visitor intently scrutinising a street plan of London, while the human stream flows past him in Trafalgar Square or Piccadilly Circus, without strong desire to offer him guidance. There is nothing of the *Bradshaw* superiority complex about it. It is simply that one feels in something of the position of a host with a host's duty to his guests.—*From an article by "Urbanus" in the "Church Times."*

### MR. FIGGINS

Mr. Figgins has now talked himself into a position which should make it plain to the men of the N.U.R. that they would be better off without their present General Secretary.

There is to be "no compromise" on the rejected 10s. a week claim. "That is our claim and we stick to it," declares Mr. Figgins.

Apparently, in the view of this responsible union leader, neither the undertaking to accept the Conciliation Board's verdict, nor the N.U.R. support of the T.U.C. wage-freeze resolution, count for anything.

No effort is to be made to discover whether the Railway Executive would renew its original offer of increases up to 2s. 6d. for the lowest paid grades. Who told Mr. Figgins that the men would not now accept it?

He knows perfectly well that at present the 10s. claim is quite impossible and that the other railway unions will never support it.—*From "The Star."*

# OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

## PAKISTAN

### New Construction on Eastern Bengal Railway

After the partition the Benapol-Jessore-Khulna section of the Eastern Bengal Railway became isolated from the main system and could be reached only via Ranaghat and Bongaon on the East Indian Railway. To provide a direct connection, the construction of a broad-gauge line, about 42 miles long and estimated to cost about Rs. 74 lakhs, has been sanctioned and the work has been taken in hand.

### Rolling Stock

The Railway Division of the Ministry of Communications, which controls the two railway systems in Pakistan, has completed its plans for locomotives and other rolling stock. It has already received tenders for the supply of 300 broad-gauge covered wagons for the North Western Railway and is calling tenders for the supply of 44 passenger and goods metre-gauge locomotives for the Eastern Bengal Railway, 216 broad-gauge and 65 metre-gauge carriage underframes for the N.W.R. and E.B.R. respectively, and 150 metre-gauge complete carriages and 620 metre-gauge covered jute wagons for the E.B.R.

## SOUTH AFRICA

### Transport of Cattle

Cattle wagons have been in heavy demand for some months, and wagon supply difficulties have been accentuated by the drought in various parts of the country, notably in the Cape Eastern Province. Special trains have had to be run to move drought-stricken stock to new pastures, and many wagons provided for stock sales in various parts of the country. In the last week of July, some 500 wagons were loaded with market stock in South-West Africa.

Throughout June, the weekly demands for cattle transport required from 4,100 to 5,000 wagons. Many of these were for drought-stricken stock which in many instances had to be conveyed over long distances. During May and June, nearly 40,000 wagons were used on livestock traffic, either in connection with the drought or for the conveyance of livestock to markets. This transport of livestock constitutes a difficult problem for the railways as heavy demands are frequently received from widely separated areas without previous warning. This, in turn, necessitates the withdrawal of wagons from general goods traffic.

### Directional Loading

The railways have introduced directional loading of wagons wherever practicable to speed up the handling of consignments of less than a full wagon load and to permit of the more economical use of vehicles. The old system often needed several transshipments of small consignments with consequent delays, and wagons were kept under load for unnecessarily long periods. Under the directional loading system, certain days of the week are allocated for loadings to particular areas, and industrial undertakings, the commercial community, farmers, and other consignors are advised when they should have their goods at the station. In this way, full wagon loads are made up at the station of despatch, and these can be sent direct to their destination or to the farthest tranship or concentration depot. Delays are avoided by using this

method of loading, and the reduction of handling at tranship points minimises the possibility of damage, pilferage, and incorrect loadings en route.

For some months a senior railway official has been visiting various centres throughout the Union discussing the potentialities of directional loading with representative commercial and industrial undertakings, and it is as a result of these investigations that the new scheme is being brought into operation.

## UNITED STATES

### More Diesels for Rock Island Suburban Services

The Chicago Rock Island & Pacific has received from General Motors Corporation six more 1,500-h.p. diesel-electric locomotives for its Chicago suburban service, making twelve of this type so far delivered. Eight more are required to effect complete dieselisation of Chicago suburban services.

## ITALY

### New Bridge on Bologna-Venice Line

The Minister of Transport recently opened the six-span single bridge over the River Po between Pontelagoscuro and Ferrara on the line between Bologna and Venice. The original bridge was built in 1871, with four central spans of 76.7 m. and the two side spans of 60.6 m. During the war, in consequence of air raids, some of the pillars of the bridge were heavily damaged, and the whole metal structure sank into the river. The Allies built a temporary bridge 15 m. north of the damaged bridge in July, 1946, consisting of 17 metal structures of military type.

Early in 1948, the State Railways began the reconstruction of the bridge by rebuilding the damaged pillars in concrete and rebuilding the six metal spans. The total weight of the metal used on the new bridge exceeds 1,900 tons.

The cost of the rebuilt bridge was lire 640,000,000, of which lire 120,000,000 were for the concrete and masonry works, lire 510,000,000 for the metal, and lire 10,000,000 for the accessories. Of this, lire 505,000,000 of the total cost have been covered from the E.R.P. lire fund.

### New Construction

In the autumn of 1950, a short standard-gauge electric link connecting Avellino, south east of Naples, on the Benevento-Nocera line, with Palma-San Gennaro, on the Naples-Cancello-Codola line, is to be begun. It will be a short cut to obviate the considerable detour which has to be made (via Nocera, on the Naples to Reggio-Calabria main line) when reaching Avellino from the west. Palma is 10½ miles north of Codola (where the lines from Cancello and Nocera meet), and the new route will shorten the present distance between Naples and Avellino (27½ miles via Nocera) by about a third.

A project in north-western Italy envisages the improvement of the existing Savona-Turin main line between San Giuseppe di Cairo and Ceva. Certain gradients and curves on this 15½-mile section are so difficult that despite electric traction some heavy mineral, particularly coal, trains from Savona have to be diverted from San Giuseppe di Cairo via Alessandria. San Giuseppe di Cairo is 13 miles north of Savona, and a ropeway

with a capacity of 1,000 tons an hour has been built for the conveyance of the coal direct from discharging vessels at Savona to the dumps adjoining San Giuseppe Station to relieve railway transport. San Giuseppe di Cairo is at an altitude of 1,122 ft. and Ceva at 1,270 ft. The difficulties on this section are to be overcome by the building of two tunnels, of which one, nearer to San Giuseppe, will be 13,120 ft. long, and the other 29,520 ft. At present, the line rises to 1,552 ft. (473 metres) between San Giuseppe and Ceva.

## FRANCE

### Reduced Rate Facilities for Better Packing Methods

Compensation paid in respect of damages to goods in transit resulting from bad or careless packing is said to have been a contributory cause of the deficit of the French National Railways. Defective packing in consignments of eggs alone is stated to have caused compensation claims varying from fr. 150,000,000 to 200,000,000 annually.

To obviate this, and encourage the egg trade to adopt special trays with hollows for the eggs, the railways have introduced a specially reduced preferential rate for egg consignments packed in this way which reduces breakage to a minimum. The new rate has not yet been extended to consignments of eggs packed in standard boxes with wood pulp packing, a method which has been in use for many years in Morocco, Algeria, Poland, and other countries.

Also, claims have been made for preferential rates for consignments of fresh fruit and vegetables packed in modern standardised packings. A decision to introduce these rates was taken a few months ago.

## JUGOSLAVIA

### New Railway in Serbia

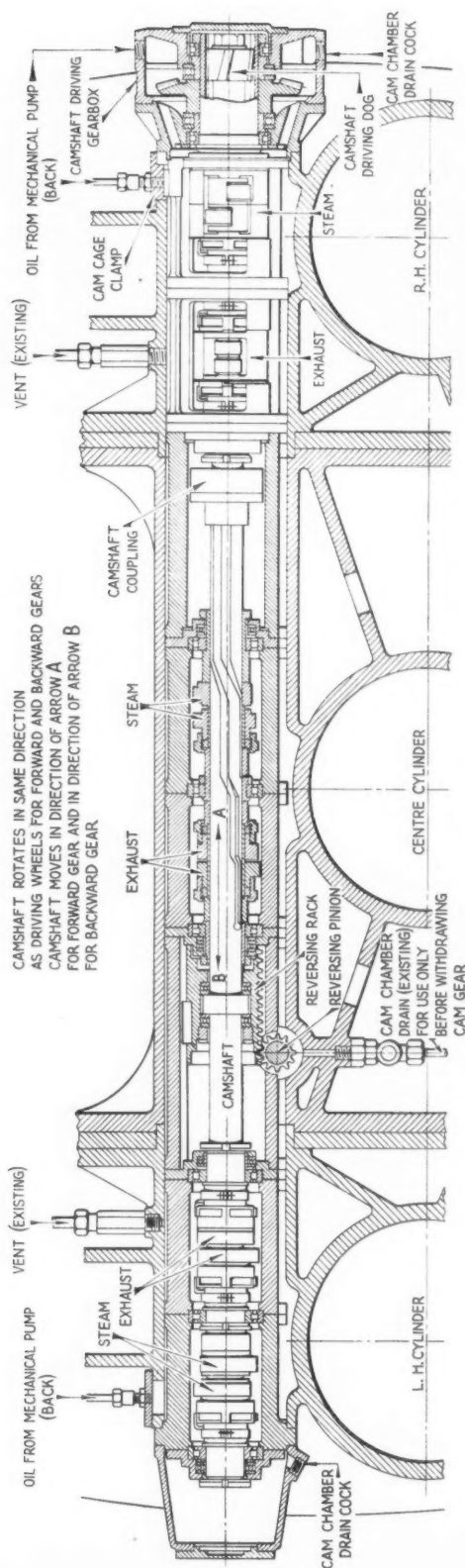
The building of a 23½-mile standard-gauge railway in eastern Serbia was taken in hand recently. It is to branch at Markovac from the Belgrade-Nish main line, and lead via Svilajnac to Despotovac, the centre of a coal-mining region. Markovac is 62½ miles from Belgrade, and 6.2 miles south of Velika Plana, where the line from Smederevo joins the Belgrade-Nish main line. It will contribute towards the development of the eastern Serbian coal economy.

## BELGIUM

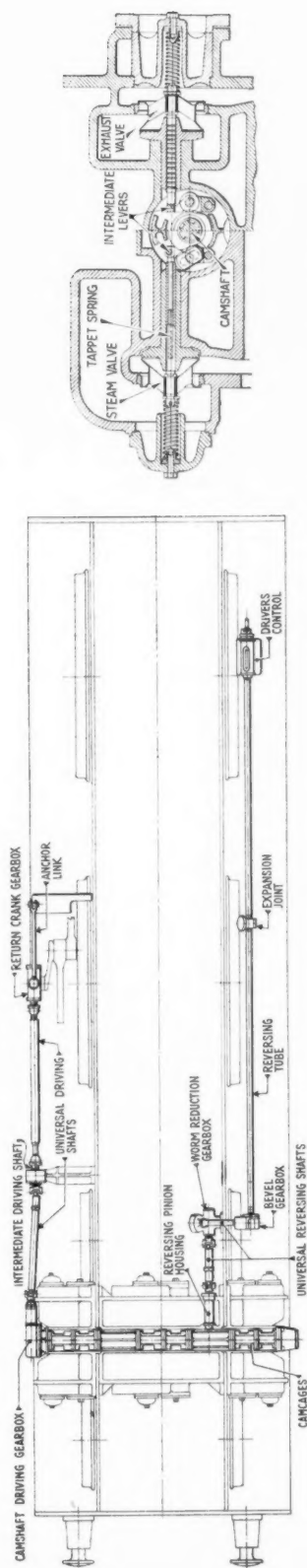
### Modern Train Indicators for the Brussels Junction Railway

The new stations on the Brussels Junction Railway are being equipped with a modern electric train-describer system not unlike certain systems used in this country. The intensive working envisaged over the six tracks of the Junction Line makes it necessary to divert trains to other platforms at short notice. The electric train describers will therefore be controlled from the signal boxes of the Nord and Midi stations respectively, and the indication displayed at the first station will be automatically transmitted to the three intermediate stations (Congrès, Centrale, and Chapelle), where no signal boxes exist. The indicator boards will be installed in the subways and on the platforms, and will display the destination (with 36 possible varieties), the time of departure, the class of train and, in the case of certain international trains, also the name of the train ("Nord Express," "Oiseau Bleu," and so on.).

## Infinitely-Variable R.C. Poppet Valve Gear



*Cross-sectional arrangement of the cam chamber, looking from the cab*

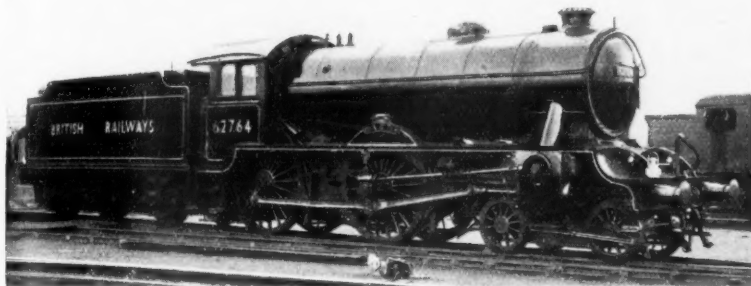


*Arrangement of valve gear, plan view (left); cross-sectional arrangement of steam and exhaust poppet valves (right)*



## Infinitely-Variable R.C. Poppet Valve Gear

*A "Hunt" class locomotive fitted with this gear has been in service on British Railways, North Eastern Region, and is to be fully tested at Rugby*



"Hunt" class 4-4-0 locomotive, No. 62764 "The Garth" recently fitted with infinitely variable R.C. poppet valve gear

ONE of the "D49" class, three-cylinder 4-4-0 locomotives, No. 62764, *The Garth*, of British Railways, Eastern and North Eastern Regions, has recently been fitted with an infinitely-variable rotary-cam poppet valve gear, type "RR," supplied by Locomotive Valve Gears Limited, in accordance with the Reidinger patents. The locomotive is one of a series introduced by Sir Nigel Gresley in 1932 and fitted with poppet valves operated by rotating cams, though the gear which was then fitted provided only five positions of cut-off and so imposed certain limitations on working. The leading dimensions are as follow:—

Cylinders, dia. and stroke	17 in. x 26 in.
Coupled wheels, dia.	6 ft. 8 in.
Working steam pressure	180 lb. per sq. in.
Total heating surface, including superheater	1,669 sq. ft.
Grate area	26 sq. ft.
Tractive effort, at 85 per cent. b.p.	21,556 lb.
Valves—Steam	6½ in. dia.
Exhaust	7 in. dia.

When the gear was fitted at the Darlington works only minor alterations to the engine were necessary as it had previously been fitted with the R.C. gear, and the original driving gear and reversing gear were retained. The cylinders are in three separate castings, the cam shaft being situated above the cylinders with its axis horizontal and at right angles to the centre line of the locomotive. The steam and exhaust valves are arranged in the horizontal plane, there being a separate steam valve and a separate exhaust valve at each end of the cylinder.

The cam shaft is driven by means of a worm gearbox fitted on a return crank at the right-hand side of the engine, through a tubular driving shaft extending forward to a bevel driving gear mounted on the cylinder casting. The cam shaft is housed in a circular cavity cast integral with the cylinders and the whole of the cam operating gear can be fitted and removed as a unit. Two inlet and two exhaust cams are provided for operating the four valves of each cylinder. The two cams operating the admission valves have a differential action transmitted to the valve spindles through the medium of intermediate levers, fitted with swing beams and follower rollers.

The differential action of the steam cams permits of an infinite variation in the range of cut-offs between full-gear and mid-gear in each direction of running and provides a full valve opening to steam at all cut-offs

between full-gear and about 12.5 per cent. cut-off, whilst at 10 per cent. cut-off the valve opening is equal to 90 per cent. of the maximum area through the valve. The two exhaust cams also work on the differential principle, but due to the fact that the variations in the events controlling exhaust are not so wide as those controlling admission, the intermediate levers are fitted with two rollers, one for each cam, though swing beams are not required.

As in the case of the steam cams, those for exhaust give full valve openings to exhaust at all cut-offs, the difference being that full valve openings are available from full-gear to mid-gear. A special feature of the gear as fitted in this instance, is a separate cam adjusting device for re-setting their angularity on the cam shaft relative to the engine cranks. The incorporation of this feature makes it possible to adjust individually the valve timings for pre-admission, release and compression for any rate of cut-off per cent. These adjustments cannot be effected by the driver, as the reversing control in the cab only allows the engine to be operated in accordance with the valve settings provided. By means of the cam adjusting device, it is possible to obtain over 1,000 different sets of valve events with the gear, any one of the settings being obtained without modifying or exchanging any of the component parts of the equipment.

### Steam Distribution Experiments

For the first time, therefore, experiments may be carried out with the steam distribution system, so that the points of pre-admission, release and compression may be co-related to an infinitely variable cut-off and thus establish the most efficient steam distribution from the point of view of thermal and mechanical efficiency.

All the cams for the three cylinders are mounted on one shaft, which has specially-formed grooves into which fit the suitably-shaped driving key of the cam operating driving members, that may be disengaged from the cams when it is desired to adjust the valve events relatively to the crank angles. Reversing and notching-up are effected by moving the transverse cam shaft endwise. The cams, however, do not slide laterally, but are held between ball and roller bearings so that they can rotate freely, and provide a true action of both cam and follower roller.

The combined action of moving the shaft through the bore of the cams and

driving members adjusts the angular setting of the cams in relation to the driving axle, and this, in conjunction with angular variation obtained by the helical splined driving dog when the cam shaft is moved laterally through the bevel gear driving sleeve, gives the necessary relative angular setting of each cam both for forward and reverse running of the engine.

The control of the cam shaft for reversal and for alterations of cut-off is obtained through the medium of a rack and pinion gear, the rack being provided with ball thrust washers to take care of the end thrust when moving the shaft transversely. The pinion gear is connected to the driver's control in the cab through the medium of suitable gearing and shafting, universally mounted where necessary. The cam shaft, bevel driving gears, and valve spindles, are mechanically lubricated, and the lubrication of the return crank gearbox and the reversing gearboxes is effected by the oil bath method.

The locomotive has been in passenger service on the North Eastern Region and is to be fully tested at the locomotive testing station, Rugby.

### INCREASE IN PERUVIAN RAILWAY TARIFFS.

—The Peruvian Corporation announces that, according to cable advices recently received, the Peruvian Government has sanctioned a number of increases in railway tariffs to compensate for higher costs of operation, including social service charges and renewals, and of future sterling remittances at unofficial exchange rates. These are:—Central Railway: passengers and foodstuffs, 60 per cent.; other traffic, 66 per cent.; other railways, 40 per cent.

SCOTTISH MOTOR TRACTION.—In his prepared speech, read to the recent extraordinary meeting of the Scottish Motor Traction Co. Ltd., the Chairman, Sir William Thomson (who was then ill, and has since died) referred to the sale of the passenger road transport undertakings to the British Transport Commission, details of which were given in our April 29 issue. After payment of the purchase price, he said, funds would much exceed what the company could usefully employ, and repayment to stockholders of approximately the whole sum received was the only proper method. Preference stockholders must be paid off first, and at par; payment to this class of a premium could be opposed as *ultra vires*. In accordance with the agreement of sale, the B.T.C. would provide £500,000, or one half of the sum required to repay the preference stock; the B.T.C. holding of one half the ordinary stock would be cancelled, leaving £502,989 issued capital in the hands of the general public. He would ask the meeting to pass resolutions to effect this. The capital thereby would be reduced by some £1½ million. By voting to increase it again by the same amount, but leaving it unissued, they would avoid payment of capital duty on the increase, but have capital available for any future issues. The meeting was asked to pass further resolutions to enable £8,047,836 (nominal) Transport Stock 1968-73 of the funds received from the sale of passenger road transport assets to be distributed to ordinary shareholders in the proportion of £4 (nominal) for every 5s. unit of ordinary stock held. They now were left with two trading concerns, namely, the S.M.T. Sales & Service Co. Ltd. and the Scottish Midland Guarantee Trust Limited. The resolutions were carried.

## Gauge Conversion in South Australia

*A section of narrow-gauge line serving a thriving district is being converted to broad gauge to obviate irksome transshipment*



*Goods train on the 5-ft. 3-in. gauge Adelaide—Serviceton main line near Banealla. The converted 3-ft. 6-in. lines in south-east South Australia will carry this type of stock*

THE South Australian Railways system totals 2,557 miles, of which 1,480 miles, all radiating from Adelaide, are 5 ft. 3 in. gauge. The remaining 1,077 miles are 3 ft. 6 in. gauge, and mostly lying north or west of Adelaide and some considerable distance from it, but there is a section of approximately 230 miles of narrow-gauge line in the south-east of the State, the subject of the present article.

The main southern line (5 ft. 3 in. gauge) stretches from Adelaide to Serviceton, just over the border in Victoria. The last South Australian station before the border is Wolseley, whence a 3 ft. 6 in. gauge line runs almost due south for 114 miles to Mount Gambier, 305 miles from Adelaide. Mount Gambier is the "capital" of the rich and prosperous corner of the State generally referred to as the "south-east" and in railway parlance the South-Eastern Division. In addition to the main south-eastern narrow-gauge line from Wolseley to Mount Gambier, there are three branches, one from Naracoorte and the other two from Mount Gambier.

Mount Gambier is only just over eleven miles from the Victorian border, and the South-Eastern Division of the South Australian Railways also includes a 5 ft. 3 in. gauge line running almost due east for this distance into Victoria. It is worked for the South Australian authorities by the Victorian Railways and continues on into Victoria as part of the Victorian Railways system. It will be seen therefore that the Wolseley-Mount Gambier line and its branches are isolated between two broad-gauge systems. Mount Gambier is an important business and pastoral centre and a popular tourist resort, noted for its beautiful crater lakes of volcanic origin.

All passengers to and from Adelaide have to change trains at Wolseley, and freight and livestock, of which there is a considerable quantity, have to be transferred. To eliminate these disadvantages the South Australian Railways Commissioners have obtained authority to convert the main south-eastern narrow-gauge line to broad gauge from Wolseley through Mount Gambier to Millicent on the Beach-

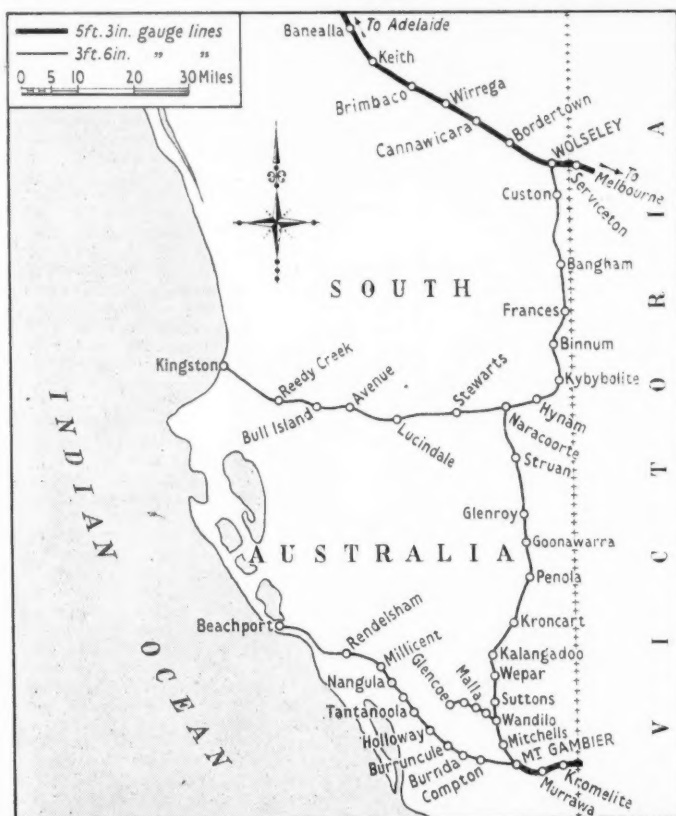
port branch. The work is now in progress. The first section selected for conversion is that between Wolseley and Naracoorte, and considerable progress has already been made.

For many years Wolseley and Mount Gambier have been "three-rail" stations so that both broad and narrow-gauge trains can use the same platforms and sidings, with one rail common to both gauges. To effect the conversion of the South-Eastern Division it was not just a matter of setting rails further apart, but of preparing a track capable of accommodating locomotives and rolling stock of both gauges until the narrower gauge should cease to operate.

### Mixed Gauge

The method adopted was to lay a third rail outside the existing narrow-gauge line, and regrade and re-ballast the track, and widen cuttings, culverts and bridges where such alterations were called for. Broad-gauge rolling stock and locomotives are considerably heavier than those used on the 3 ft. 6 in. gauge lines and therefore heavier rails were desirable. What has been done is to lay a broad gauge track of heavier rails and larger sleepers than those previously used, with a third rail of lighter weight set at a distance of 3 ft. 6 in. from one of the heavier ones. Thus, the present narrow gauge service is able to operate while the outside rail remains unused until the work is completed.

Sidings in station yards have also been completed with gaps left at points. Points can then be installed when the whole track is ready for the changeover. The broad gauge rails are welded lengths of 240 ft. on the main line and 200 ft. lengths in station yard sidings. The welding was done at the Mile End Welding Depot near Adelaide. Rails and sleepers are as



*Broad and narrow-gauge lines in the south-east of South Australia. The Wolseley-Mount Gambier-Millicent sections are to be converted to broad gauge*

sembled at points along the line where required, and construction gangs are housed in camps. All rolling stock used in the conversion is 3 ft. 6 in. gauge. Special ballast trains are run as required, using wagons of 25-ton capacity.

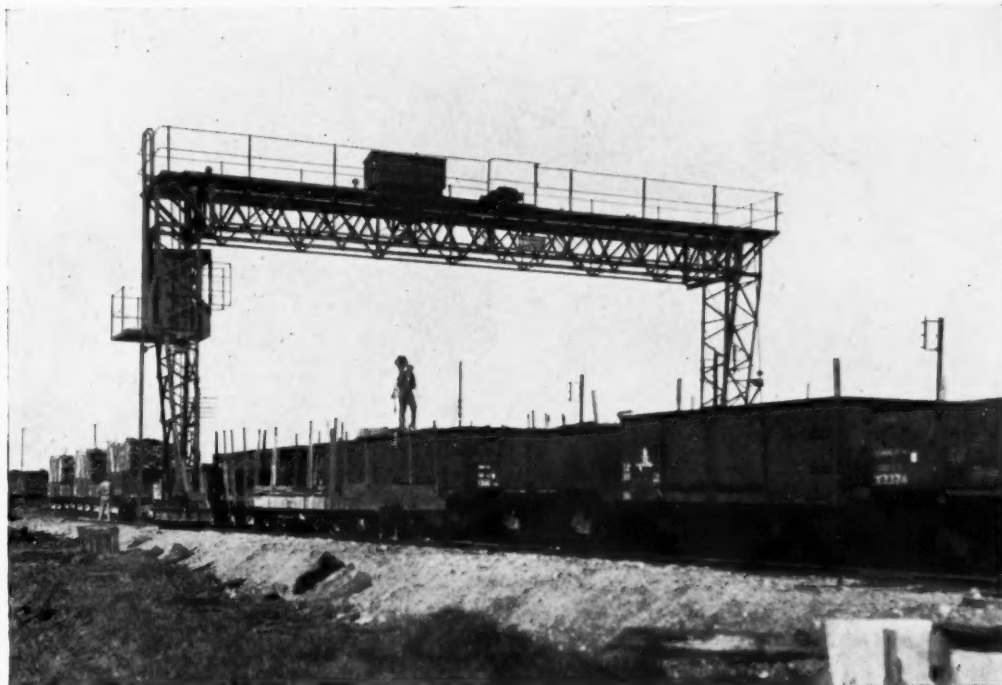
One interesting vehicle is the ballast plough wagon of 12½-ton weight, for spreading ballast. Fortunately the country traversed is only slightly undulating

each terminus in the morning, with Wolseley as the break-of-gauge station. Three times weekly passengers may leave Adelaide by the "Overland" to Melbourne changing at Wolseley in the early hours of the morning. Similarly the night train from Mount Gambier links up with the "Overland" from Melbourne.

Sleeping cars are provided on the Mount Gambier line but in either direction the

Gambier. This will avoid erecting temporary transfer equipment at Naracoorte.

Locomotives of the South-Eastern Division are similar to all narrow-gauge engines in South Australia. The most powerful used for main line work is the "T" class of 4-8-0 wheel arrangement with two cylinders 16½ in. by 22 in. and 185 lb. per sq. in. boiler pressure. Coupled wheels are 43 in. in dia. and tractive power



Overhead transfer equipment at Wolseley, the present break-of-gauge point for Mount Gambier, South Australian Railways

and as much of the soil is sandy, no intricate feats of engineering are involved. In the initial stage of the journey from Wolseley the train passes through several tongues of the Ninety Mile Desert, the main portion of which is crossed during the latter part of the run from Adelaide on the broad gauge line.

The present passenger service consists of a daily train to and from Adelaide, leaving

change is at an inconvenient time. No doubt in the future a through sleeper will be possible by being attached to or dropped from the inter-state express. As soon as the gauge widening is completed to Naracoorte broad gauge trains will work direct to and from Adelaide. Wolseley will still be used as the freight transfer point for all stations south of Naracoorte until the broad gauge reaches Mount

at 85 per cent. boiler pressure is 21,903 lb. Weight is 78 tons. Broad-gauge locomotives working up to Wolseley are more than double this weight, so that the reason for heavier rails and sleepers on the converted line will be apparent. Other locomotives available on the South-Eastern Division are smaller than the "T" class and are of 2-6-0 and 4-4-0 wheel arrangement, locally built, from original Beyer Peacock design.

**FEDERATION OF RAILWAY LECTURE & DEBATING SOCIETIES.**—The Federation of Railway Lecture & Debating Societies (North Eastern Region) under the Chairmanship of Mr. E. W. Arkle, Commercial Superintendent, North Eastern Region, has arranged three meetings for the 1949-50 session. The first meeting will be held on October 18 in the Railway Institute, York, when Mr. Alfred Barnes, Minister of Transport, will give an address. The second meeting will be held in the North Road Institute, Darlington, on December 13 and will be a debate between the Federation and the Railway Students Association of Edinburgh. The final meeting of the session will be on March 7 in the Railway Institute, York, when the speaker will be Mr. F. H. Cave, Deputy General Manager, Mersey Docks & Harbour Board, whose subject will be "The Port of Liverpool." In addition to the

three meetings, the Federation has arranged its usual essay competition, open to all members of the Societies constituting the Federation. The first prize is awarded by the Chief Regional Officer, and the winner holds the Sir A. Kaye Butterworth Shield for twelve months; there is a second prize awarded by the Federation. Each prize will be accompanied by a certificate signed by the Chief Regional Officer and the Chairman of the Federation.

**HARWICH CONTINENTAL SERVICES.**—Details of continental services via Harwich for the winter period commencing September 26 have been announced by British Railways, Eastern Region. The Harwich-Hook of Holland route has a day and night service, in each direction, running daily (except Sunday night) and between Liverpool Street and Parkestone Quay,

connecting train services are provided by the "Day Continental" and "Hook Continental," respectively. Between Harwich and Antwerp a service is provided on Monday, Wednesday, and Friday, in either direction, with boat trains leaving Liverpool Street at 3 p.m. and Parkestone Quay at 7.15 p.m. The "Scandinavian" provides a connection for the Harwich-Esbjerg service, which will be daily until October 1, on four days a week between October 3 and 29, and twice weekly from November 1.

**BARSI LIGHT RAILWAY.**—A second interim dividend on the Barsi Light Railway Co. Ltd. ordinary stock has been declared in respect of the half-year to March 31, 1949, of 3½ per cent. actual, payable on November 2, less income tax at 9s. in the £. No final dividend will be recommended.



## Gauge Conversion in South Australia

(See article on page 356)



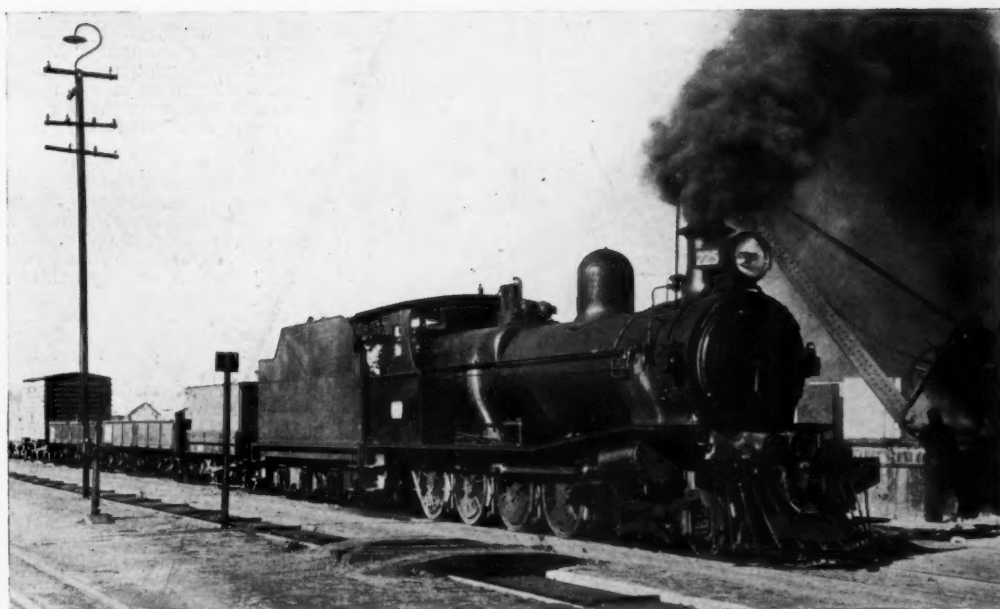
*Wolseley Station, South Australian Railways, showing three-rail tracks for 5 ft. 3 in. and 3 ft. 6 in. gauges. The main Adelaide—Melbourne line is on the right-hand side of the platform*



*Section of track between Wolseley and Naracoorte partly converted to 5 ft. 3 in. gauge*

## Gauge Conversion in South Australia

(See article on page 356)



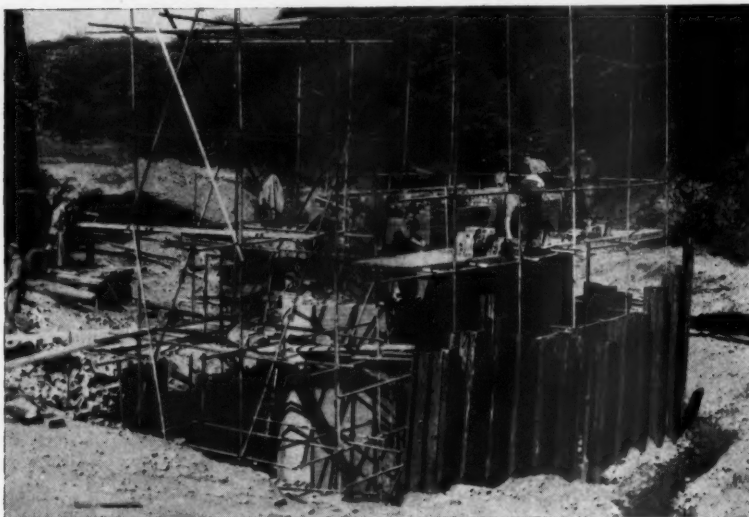
*"T" class 4-8-0 locomotive at Mount Gambier, 3 ft. 6 in. gauge*



*Rebuilt narrow-gauge 2-6-0 locomotive shunting at Wolseley, on three-rail track*

## Repairs to Eyemouth Viaduct, Scottish Region

*Further progress in the Border Country towards the restoration of unrestricted train services which were dislocated by floods a year ago*



*Driving steel-sheet piling into the gravel to form a cofferdam for the foundation of the centre pier*

THE storm which swept over north-east England and south-east Scotland on August 12, 1948, was no ordinary one, and the flooding which resulted was the worst experienced in that part of the country for many years. As was reported in our issue of August 20, 1948, main and branch lines of the North Eastern and Scottish Regions suffered serious damage.

The full resources of British Railways in men and materials, together with help from other sources, were at once made available for the work of restoring direct communication between Edinburgh and Berwick. Both tracks of the Edinburgh to Carlisle line were reopened to traffic within a few days.

### The East Coast Line

The East Coast main line, however, on the stretch between Dunbar and Berwick, a distance of 28 miles, was damaged at 27 points, and the fact that seven bridges were completely washed away makes it all the more remarkable that passenger train services over this route were restored as soon as November 1, 1948.

Outstanding performances of the rehabilitation, which has been referred to on a number of occasions in these pages,\* were the clearing of landslides, the draining off of the impounded waters at Ayton embankment, where an artificial lake of over a mile in length had been created, and the rebuilding of the seven bridges. The bridges erected are of a temporary military type.

During the past twelve months the progress on all repair and reconstruction work has been maintained, and when once the construction of the culvert at Ayton is complete and the permanent bridge girders are in position, the main-line services will be freed of the existing speed restrictions.

The branch line from Burnmouth to

Eyemouth, along the coast, crosses the Eye Water on a high viaduct consisting of six 50-ft. wrought-iron spans supported on brick piers. Although the girders were not dislodged, the centre pier of the viaduct was undermined and collapsed.

Repairs to Eyemouth Viaduct, which carries a single line across the Eye Water, have now been completed, and, as was reported in our July 22 issue, the viaduct was officially reopened on June 29. The viaduct is 332 ft. in length and consists of six lattice girder spans carried on piers. The piers are composed of concrete with brick facing, and the height of the viaduct from rail level to water level is 60 ft.

The river is normally confined to span No. 5. During the flooding, however, the width of the Eye Water was such as to

occupy all the spans. Due to the scouring action of the water, the gravel underlying the centre pier, No. 3, was washed away, resulting in the collapse of the pier. The ends of the suspended girders were secured temporarily by ties and wedges. It was also found that considerable scouring had occurred in the bed of the mill lade situated between piers 1 and 2.

### Repair Work

Work was begun by rebuilding No. 3 pier. This involved driving steel-sheet piling 30 ft. into the gravel to form a permanent cofferdam in which the mass concrete foundation of the new pier was constructed at a depth of 12 ft. below bed level. The new pier was built of brick facework with concrete filling.

Pier No. 2 was enclosed in a permanent cofferdam of steel-sheet piling carried 25 ft. down to rock, concrete being packed into the scoured portion under the foundation, and also between the pier and the piling. A training wall of steel-sheet piling driven 25 ft. down now forms the other side of the mill lade.

The scoured portion of the mill lade was brought up to within 1 ft. of bed level with packed material from the collapsed pier, which was used also for protective works to the banks of the mill lade at No. 2 pier. The bed of the mill lade consists of a concrete mat 1 ft. thick on top of the packed material.

Pier No. 4 is founded on gravel overlying rock, and, in this case, permanent steel-sheet piling was driven 12 ft. down to rock all round the pier, and the space between the pier and the piling packed with concrete.

The original foundations of Pier No. 5 were examined and found to be on rock. A new cutwater was constructed as well as a concrete wall carried down to rock along the river side of the pier and round one end as a protective measure. To enable the work at piers 4 and 5 to be carried out in the dry, the river was diverted through a new channel in the vicinity of No. 3 pier, and this channel has been left.

The work at the mill lade was carried out in the dry at intervals to suit the convenience of the Eyemouth Milling Company, co-operating in the work of repair and reconstruction with Sir Robert McAlpine & Sons (Scotland) Ltd.



*Showing the scoured portion of the mill lade at Eyemouth Viaduct*

\* Other references to the progress of the repair work were made in our issues of August 27, September 17, October 1 and 29, and November 5, 1948.



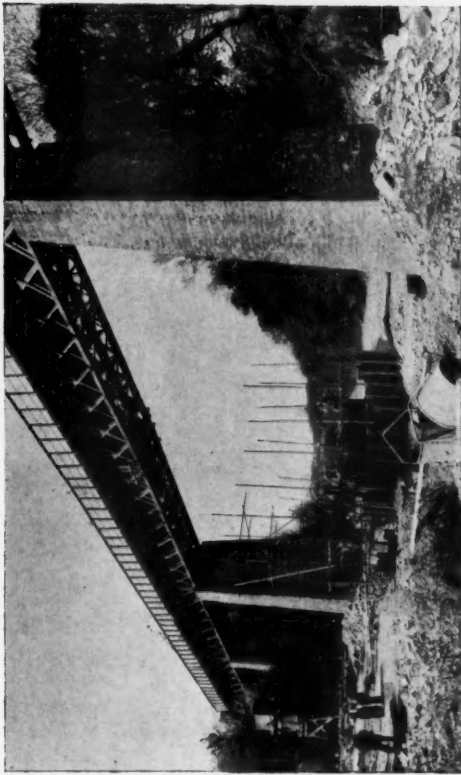
## Repairs to Eyemouth Viaduct, Scottish Region



*Eyemouth Viaduct after the floods of August 12, 1948, which caused the collapse of the centre pier*

*Photo*

*"The Scotsman"*



*View of the viaduct showing work in progress on the foundations for the new centre pier*



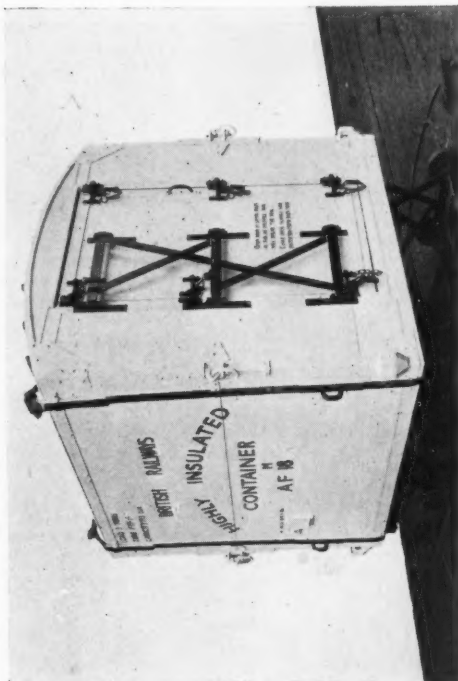
*The training wall of the new mill lade consists of steel-sheet piling driven 25 ft. down and capped with concrete*



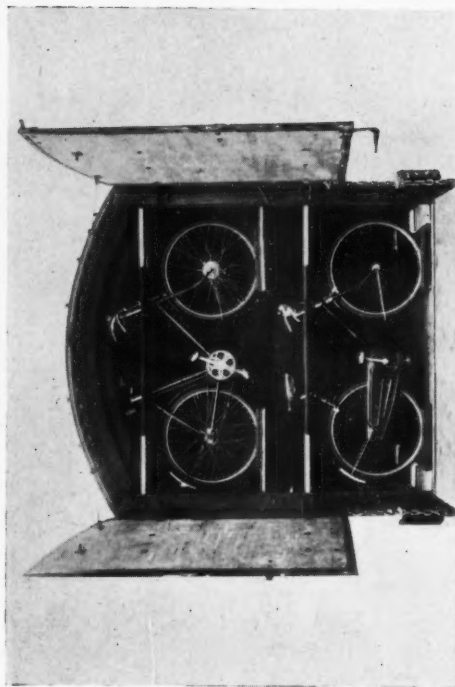
*Showing the recently repaired viaduct on the Eyemouth branch line with its new centre pier and cutwaters*

## Examples of British Railways Containers

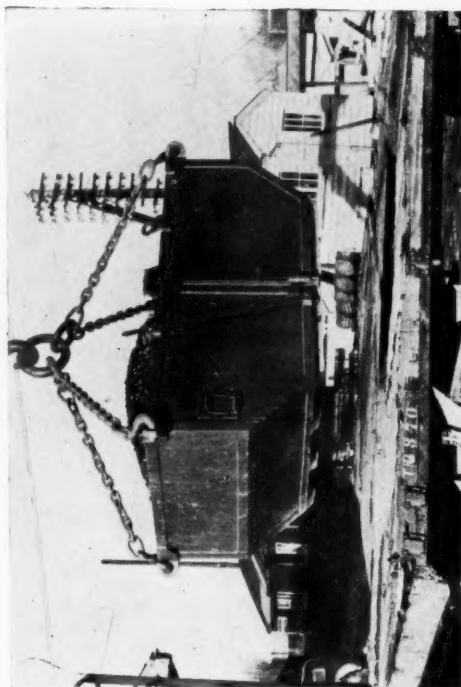
(See also editorial note on page 346)



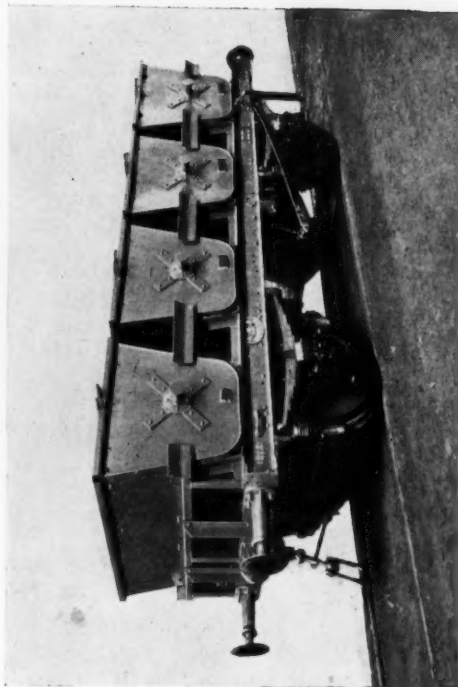
*Highly insulated container for transporting foodstuffs at very low temperatures*



*Bicycle container fitted with racks to separate machines in transit*



*Prototype container with gravity discharge for conveying road making materials*



*Wagon with skips for rapid unloading by crane of roadstone into road vehicles*

## RAILWAY NEWS SECTION

## PERSONAL

The Victorian Government has appointed Mr. R. G. Wishart, a Commissioner of Railways, to succeed Lt.-Colonel N. C. Harris, who will retire shortly, as Chairman of the Railways Commission of that State.

Mr. C. J. T. Eivers, Finance Officer, Secretary's Branch, Western Australian Government Railways, has been appointed Secretary for Railways, in succession to Mr. P. C. Raynor, who was recently appointed an Assistant Commissioner of Railways, Western Australia. Mr. Eivers had been Acting Secretary for Railways since December, 1948.

We regret to record the death on September 18, at the age of 68, of Sir William Johnston Thomson, D.L., LL.D., Chairman & Managing Director of the Scottish Motor Traction Co. Ltd.

Mr. Robert Montgomery, Joint Liquidator of the British-owned railways in Argentina, recently returned to Buenos Aires after a business trip to London.

Mr. J. C. Jones, General Manager of the Paraguay Central Railway, and Mr. L. V. K. Duff, General Manager (Bolivia) of the Antofagasta (Chili) & Bolivia Railway, recently arrived in Buenos Aires from England on their way to take up their respective posts after periods of leave.

Mr. P. C. E. Rose has been appointed a Director of the Saunders Valve Co. Ltd.

Mr. R. H. Hainsworth has been appointed a Director of Specialoid Limited.

The Minister of Supply has appointed Mr. H. M. Garner to be Chief Scientist of the department, in succession to Sir Ben Lockspeiser.

We regret to record the death, at the age of 65, of Mr. J. J. Walsh, District Traffic Superintendent, Cork. Coras Iompair Eireann (previously G.S.R.).

## ROAD HAULAGE NATIONAL STAFF COUNCIL

The National Staff Council set up by the Road Haulage Executive and the unions concerned held its inaugural meeting on September 16. The council met to implement a recent agreement between the Executive and the unions providing for negotiating machinery at national, divisional and local levels. The council appointed the following officers:—Chairman: Major-General G. N. Russell (Chairman, Road Haulage Executive); Vice-Chairman: Mr. A. E. Tiffin (Assistant General Secretary, Transport & General Workers' Union); Joint Secretaries: Mr. Robert Watson and Mr. Frank Cousins (for the Executive and the unions, respectively).

Mr. B. B. Varma, B.Sc., M.I.E. (India), after relinquishing his post of Officer on Special Duty with the Indian Ministry of Railways (Railway Board) in connection with the implementation of the report of the Indian Railway Inquiry Committee, recently took over as General Manager of the East Indian Railway. Mr. Varma was born in 1897, and has been in railway service since 1920, when he joined the Oudh & Rohilkund Railway as an apprentice

will now be responsible for those works. Mr. A. V. Elliott, L.R.I.B.A., as Principal Assistant Architect (Railways), will continue to be responsible to the Architect for all building works for the railways carried out under the supervision of the Architect, and will continue to act as Deputy in the absence of the Architect. Mr. C. S. Boughton, L.R.I.B.A., as Principal Assistant Architect (Road Services), will be responsible to the Architect for all building works for road services carried out under the supervision of the Architect.

Mr. John Benstead, Deputy-Chairman of the British Transport Commission, has accepted the Presidency of the Railway Students' Association for the ensuing year.

We regret to record the death on September 14, at the age of 74, of Mr. Bernard Pemberton Ellis, M.I.C.E., M.I.Mech.E., who retired in 1948 from the firm of Rendel, Palmer & Tritton, after nearly 50 years service, latterly as a consultant. For many years he had been concerned with design and supervision of construction of carriages, wagons, locomotive boilers, breakdown cranes, and other equipment for Indian and other railways.

Mr. J. W. Tonge, who was appointed Public Relations Assistant to the Public Relations & Publicity Officer, London Midland Region, under the recent reorganisation of the Public Relations & Publicity activities of British Railways, was born in Manchester, and entered the Office of the Superintendent of the Line of the Lancashire & Yorkshire Railway in 1920, after demobilisation from the South Wales Borderers. After gaining experience at passenger and goods stations during the period 1923-25, he was transferred to the District Goods Manager's Office at Manchester in the latter year, and in 1927 was appointed to the Overseas

& Continental Traffic Manager's Office at Euston. Five years later Mr. Tonge was transferred to the Passenger Development Section of the Chief Commercial Manager's Office at Euston, and in 1941 was placed in charge of the Passenger Trains Section of that office, becoming Chief Clerk of the Personal & General Section in 1946. In March, 1947, he was appointed Assistant District Passenger Manager at Euston, and, a year later, Trade Advertising Assistant to the Chief Commercial Manager.

Mr. G. F. C. Olden, who was recently appointed Publicity Assistant to the Public Relations & Publicity Officer, London Midland Region, British Railways, was born at Cork, and was educated privately and at Dublin University. He served in Gallipoli and France with the Royal Dublin Fusiliers during the 1914-18 war, and in 1918 joined the Irish Traffic Manager's Office of the L.N.W.R. at Dublin (North Wall). In 1925 he was



Mr. B. B. Varma  
Appointed General Manager of the  
East Indian Railway

engineer. In 1921 he was appointed Assistant Executive Engineer, in which rank he joined the East Indian Railway in 1925 on the absorption of the Oudh & Rohilkund Railway by the East Indian Railway. He later worked on special duty with the Deputy General Manager (Organisation) on job analysis, and subsequently as Personal Assistant to the Chief Engineer. After serving as a Divisional Superintendent he went to Delhi as Director, Establishment, Railway Board, and later returned to the East Indian Railway, again as Divisional Superintendent. He then served in turn as General Manager of the Oudh Tirhut Railway, and as General Manager of the Madras & Southern Mahratta Railway, before being placed on Special Duty with the Railway Board.

The London Transport Architect's organisation for dealing with building works for railways and road services has recently been revised, and two architects





Mr. J. W. Tonge

Public Relations Assistant to the  
Public Relations & Publicity  
Officer, L.M. Region



Mr. G. F. C. Olden

Publicity Assistant to the Public  
Relations & Publicity Officer,  
L.M. Region



Mr. T. F. Coleman

Chief Draughtsman, C.M.E. Draw-  
ing Office, L.M. Region, who  
has retired



The late Mr. R. A. Sims

Lately Claims & Salvage Agent,  
Commercial Superintendent's  
Office, Western Region

transferred to the Publicity Department of the General Manager's Office, L.M.S.R., where he was first attached to the press editorial side, and subsequently dealt with production matters. During the recent war, Mr. Olden served with the Royal Engineers (Movement Control Section), and, after returning to the L.M.S.R., was appointed Assistant to the Advertising & Publicity Officer in 1947.

Mr. E. T. Gill is joining the Climax Molybdenum Co. of Europe Ltd. as Metallurgical Engineer.

Mr. T. F. Coleman, Chief Draughtsman, Chief Mechanical Engineer's Drawing Office, London Midland Region, British Railways, who has retired, was born on May 28, 1885, at Endon, Staffordshire. After serving an apprenticeship at Kerr Sturats, Stoke-on-Trent, he joined the North Staffordshire Railway in 1905. In 1926 he was transferred to Horwich, L.M.S.R., as Chief Draughtsman, Loco-

motive Drawing Office, and seven years later he went to Crewe as Assistant Chief Draughtsman, Headquarters, and Chief Draughtsman, Crewe Locomotive Works. He was appointed Chief Draughtsman, Headquarters, Derby, in 1935. During his period of office at Derby the designs of many notable locomotives have come off the drawing board.

We regret to record the death on September 4, at the age of 62, of Mr. R. A. Sims, who retired on December 31 last from the position of Claims & Salvage Agent, Commercial Superintendent's Office, Western Region, British Railways. Mr. Sims joined the Great Western Railway at Bristol in 1902, and served in that district, and at Weymouth and Oxford, until 1936, when he was appointed Chief Clerk to the London District Goods Manager. In 1937 he was promoted Assistant Goods Agent at Paddington, and a year later was made Assistant District Goods Manager at Bristol. Early in 1940 he was transferred

to Paddington as Claims & Salvage Agent. He took a prominent part in the development of measures for the prevention of claims, representing the G.W.R., and later the Western Region, on various committees; and in 1948 he was nominated by the Railway Executive to serve on a special committee to investigate transit losses. The funeral service for Mr. Sims was held on September 9 at Christchurch, Reading, and was followed by interment at the Municipal Cemetery, Caversham. British Railways were represented by Mr. C. Furber, Commercial Superintendent, Western Region, who also represented Mr. David Blee, Member of the Railway Executive, and the Commercial Superintendent's staff. Those also present, in addition to family mourners, included:—

Mr. H. E. Hedges, General Assistant to Chief Regional Officer (also representing Mr. K. W. C. Grand, Chief Regional Officer); Mr. T. H. Hollingsworth, Mr. J. Powell (also representing Mr. C. H. Coe and Mr. H. H. Starr), Mr. W. B. Court, Mr. H. W. Howard, Assistants to Commercial Superintendent; Mr. W. G. Hodgkinson (also representing Railway Clearing House Claims Committee), Mr. C. Bullock, Mr. F. Daffern, all of Commercial Superintendent's Office, Paddington; Mr. H. B. Barnsley and Mr. E. G. Connor (representing Mr. H. Bolton, District Goods Manager, Bristol); Mr. J. A. R. Horsley (representing Mr. R. P. Davis, District Freight Superintendent, Paddington); Mr. D. H. Hawkeswood, District Goods Manager, Exeter; Mr. D. J. Williams (representing Mr. E. Havers, District Goods Superintendent, Reading); Mr. A. J. Littlehales (representing Mr. Wilfrid Lampitt, District Goods Manager, Gloucester).

#### FUNERAL OF MR. C. H. V. WINTER

The funeral of the late Mr. Cecil H. V. Winter, Assistant to the European Manager, Canadian National Railways, whose death we recorded last week, took place at Bandon Hill, Wallington, on September 16. In addition to family mourners, those present included:—

Mr. J. B. Thom, European Manager, and many other officers of the C.N.R., and Messrs. P. A. Clews, A. H. Coneybeare and G. E. Cowie, retired officers of the company; Mr. R. Foulkes, representing Mr. B. H. Russell, and Mr. W. E. Shepherd, Cunard White Star; Mr. L. E. Plenty, representing Mr. E. G. Marsden, Railway Executive; Mr. C. W. Johnston, representing Mr. G. S. Gibson, and Mr. A. J. Wotton, Trans-Canada Air Lines; Mr. E. S. Spackman, representing Mr. J. C. Patteson, Canadian Pacific Railway; Colonel A. C. Bonaffon and Mr. C. J. Phillp, Pennsylvania Railroad; Mr. E. A. Toneri, representing Mr. C. E. R. Sherrington, Railway Research Service.

#### Railway Executive v. L.M. Region Golf Match



Golfers of the Railway Executive recently beat the London Midland Region (London) Golf Club in a match played at West Herts Golf Club. Above (left to right) are, back row, Messrs. A. H. J. Turner, J. Valentine, F. Taylor, F. W. Abraham; centre row, Messrs. G. J. Harris, H. Bain, W. S. Geldard, W. F. Yates, D. F. Gowen, S. H. Scholes, D. Y. Faulkner, G. Cornish; front row, Messrs. R. C. Bond, H. J. Comber (captain of L.M.R. team), G. Morton (captain of Railway Executive team), W. B. Richards

## Western and Eastern Region Winter Train Services

*Additional reserved-seat and restaurant car facilities, and retention of certain summer services*

The principal features of British Railways, Western Region, winter train service, which comes into operation on Monday, September 26, are: the retention of a number of trains originally scheduled to run during the summer only, thereby providing improved main-line and cross-country services, as compared with last winter; 31 more trains on which seats can be reserved on weekdays, as compared with the winter service of 1948-49; more trains with restaurant-car facilities.

Among the expresses which will be retained on weekdays are the 3.55 p.m. from Birmingham (Snow Hill) to Paddington, and the 7.10 p.m. from Paddington to Wolverhampton, both trains having reserved-seat facilities. Cross-country services will be improved by the retention of the 6.15 p.m. train from Wolverhampton to Cardiff, the 7 p.m. from Cardiff to Wolverhampton, the 9.57 a.m. from Cardiff to Bristol on Mondays to Fridays, and the 10.30 a.m. from Bristol to Cardiff on Mondays to Fridays. The restaurant car services at 8.15 a.m. from Swansea to York, with return service at 12.20 p.m. from York, will also continue to run on weekdays throughout the winter. The 4.55 a.m. train from Fishguard Harbour to Paddington will run on Tuesdays, Thursdays and Saturdays.

On Sundays, expresses are scheduled to leave Paddington at 9.55 a.m. for Swansea, and from Swansea at 5.30 p.m. for Paddington, each having restaurant car and seat-reservation facilities. Other new winter cross-country services on Sundays will be the 11.50 a.m. Birmingham (Snow Hill) to Cardiff, the 5.35 p.m. Cardiff to Birmingham (Snow Hill), the 1.15 p.m. Gloucester to Cardiff, the 5.45 p.m. Cardiff to Gloucester, and the 6.35 p.m. from Westbury (Wiltshire) to Portsmouth. Other weekday improvements will result from retiming trains including the 11.50 p.m. from Paddington to Penzance, which will call at Weston-super-Mare, and the provision of a morning service from Aberystwyth to Paddington, which will leave at 7.10 a.m. and connect at Shrewsbury with the 8.55 a.m. Birkenhead to Paddington express.

Steamer services from Fishguard to Southern Ireland and from Weymouth to the Channel Islands will run thrice weekly throughout the winter.

The number of weekday trains on which seats can be reserved will be increased to 75, in comparison with the total of 44 during last winter; on Sundays seat reservations will be available on 19 trains. Restaurant car facilities will be provided on 74 services on Mondays to Fridays, an increase of 6 over last year, and on 70 services on Saturdays, which is an increase of 5; on Sundays 30 trains will convey restaurant cars.

### EASTERN REGION SERVICES

It has been found possible to operate increased restaurant car services over last winter on the Eastern Region, and there will also be an increase in the number of trains on which seat reservations may be made.

To provide an earlier morning service from Leeds and Bradford to Kings Cross, the 8.15 a.m. Leeds to Kings Cross and the 7.40 a.m. Bradford to Kings Cross will be retimed to leave Leeds (Central) 7.20, Bradford (Exchange) 6.45 a.m. and will also provide an earlier morning service

from Retford and other points to London. In connection with the 6.45 a.m. Bradford to Kings Cross train, the following services will be altered to maintain connection:—

7.49 a.m. Sheffield (Victoria) to Retford and Cleethorpes will start at 7.28 a.m. and be retimed throughout, due Retford 8.20 a.m.  
9.28 a.m. Lincoln to Grantham will leave at 8.35 a.m. and be due Grantham 9.17 a.m.

The 7.30 a.m. Doncaster to Peterborough (North) will leave at 7.15 a.m. and be retimed throughout; a 9.9 a.m. arrival at Grantham will enable connection to be made with the 6.45 a.m. Bradford (7.20 a.m. Leeds) to Kings Cross mentioned above.

The 12.20 p.m. Kings Cross to Newcastle and 10 a.m. Newcastle to Kings Cross on weekdays will be a named train, "The Northumbrian" running at the undernoted times:—

	a.m.		p.m.
Newcastle depart	10.0	Kings Cross depart	12.20
Darlington "	10.50	Grantham arrive	2.22
York "	11.40	Grantham depart	2.28
Grantham arrive	1.18	York arrive	4.8
Grantham depart	1.23	Darlington "	5.2
Kings Cross arrive	3.31	Newcastle "	5.55

The 9.30 a.m. Kings Cross to Edinburgh and Aberdeen and 9.45 a.m. Edinburgh (5.55 a.m. Aberdeen) to Kings Cross will be suspended, and the 10 a.m. trains from Kings Cross and Edinburgh (Waverley) will discontinue calling at York. Among other adjustments which will be made are the timing of the "Queen of Scots Pullman," "Tees-Tyne Pullman," "Yorkshire Pullman," "White Rose" and "West Riding." The "Norfolkman" will run between Liverpool Street, Ipswich and Norwich only, in the existing timings.

## Memorial Plaque Unveiled in Longmoor Church

In the Garrison Church of St. Martin at the Royal Engineers Transportation Centre, Longmoor, on Sunday, September 18, the unveiling and dedication took place of a memorial plaque to officers, non-commissioned officers and men of the former H.Q. No. 1 Transportation Stores Group and 156 Transportation Stores Company, Royal Engineers (Supplementary Reserve), who gave their lives in the 1939-45 war. These units were formed of personnel of the former Southern Railway, and served in nearly all theatres of war.

The unveiling of the plaque was performed by Mrs. Chester, widow of the late Colonel A. B. Chester (formerly New Works Engineer, Southern Railway), who commanded the units during the war; and the service and dedication were conducted by the Reverend G. H. Davies, M.A., Chaplain to the Forces, who also gave the address. A very large gathering was present of old comrades of the units, of relatives and friends of the fallen, and of officers and others who had been associated with the units.

After the service, the old comrades paraded, and were inspected by the officer who first formed and commanded the units for many years from 1925 onwards, Colonel H. A. Short, C.B.E., M.C. (representing Sir Eustace Missenden); following which, with a guard of honour of the new

156 Engineers Stores Squadron, R.E. (Supplementary Reserve), under the command of Major T. H. Hobson, R.E., they took part in a march past, when the salute was taken by Lt.-Colonel G. H. B. Moss, R.E. (representing Brigadier R. Gardiner, C.B.E., Commandant, Transportation Centre, R.E., who was unavoidably prevented from attending).

Among those also present were Brigadier W. G. Tyrrell, D.S.O., and Brigadier C. A. Langley, C.B.E., M.C., former Commandants of the R.E. Transportation Centre, and Colonel R. J. Walker, O.B.E., at one time Assistant Commandant of the Centre; and Lt.-Colonel E. C. Cookson.

**OFFICIAL OPENING OF NEW I.C.I. FACTORY.**—A new factory under construction by Imperial Chemical Industries at Wilton, Tees-side, for chemical research and manufacture was opened by Lord McGowan, Chairman of the company, on September 14. The first stage of the project, which it is planned to complete by 1953, will cost £22,000,000, and it will be the largest single chemical establishment in the country. The site at Wilton covers 2,000 acres, and a plastics division operating two plants is already in production. The works have been so designed that further plants may be added in a logical manner. Work on the factory began more than three years ago.

**ROAD HAULAGE DIVISIONAL LIAISON COMMITTEE.**—It was stated by Mr. R. Morton Mitchell, Chief Executive Officer of the Road Haulage Association, at the recent meeting of the Metropolitan & South Eastern Area Committee of the R.H.A., that the first Road Haulage Divisional Liaison Committee to meet is likely to be that set up in the South Eastern Division. The representatives of the R.H.A. on the committee will be drawn from the Metropolitan & South Eastern, Southern, and Eastern Areas. At the same meeting, Mr. B. G. Turner, National Chairman, congratulated the area on the successful conclusion of the merger negotiations, which demonstrated the ability of their leaders to sink their personal interests in the good of the Association as a whole.

**INSTITUTE OF TRAFFIC ADMINISTRATION.**—At the annual conference of the Institute of Traffic Administration held at Leamington from September 16-19, consideration was given to the various factors that cause workers at all levels to like or dislike their work. It was agreed that, among the higher managerial and executive grades, the emphasis has been less on salary or financial gain as an incentive than on the desire of an individual to improve his personal status, develop his personality, and achieve a greater degree of personal freedom. Under a system of nationalised transport the scope of these incentives tends to be more limited. Among the lower grades, widespread acceptance of trade unions and the removal of the worst examples of underpayment, tended to shift emphasis from money incentive to security of employment. In every phase of transport increased education and a higher standard of living were disinclining workers to accept inferior standards of physical surroundings. Speaking at the dinner, Mr. S. E. Raymond, Chief Staff & Welfare Officer, Road Haulage Executive, said he considered that human relations were the whole key to a satisfactory solution of the problems facing the transport industry today.

## British Transport Commission Statistics

Summary of the principal statistics for  
the four-week period ended July 17

No. 7 of the current series of *Transport Statistics\** appeared so soon after No. 6 that particulars of passenger journeys originating in the month of June could not be included. The rest of the

\* British Transport Commission Statistics, 1949 Series No. 7. Period to July 17. London: British Transport Commission. Price 1s.

statistics are presented in the usual form. The staff statement shows a decrease of 718 in the number of employees, when the staff of undertakings acquired during the period is left out of account. Apart from staff engaged by the Road Passenger Executive, the Commission really added 2,858 persons to its establish-

ment and employed 11,373 more people on July 17 than on January 1. The increase is explained by the extension of "British Road Services: Road Haulage," which is the style now adopted for "Road Transport (Freight)." This branch of the Commission's activities has enlisted 21,680 employees this year.

Table 2(B) shows an increase in freight tonnage originating, due mainly to the improved production of coal and coke. There was a decrease of 55,000 tons in merchandise, in spite of higher forwardings from the Eastern and Southern

### STAFF

	Commission's Head Office	British Railways	London Transport	British Road Services (Freight)	Hotels & Catering	Steamships Marine & Docks	Inland Waterways	Railway Clearing House	Common Services: Commercial Advertisement	Total
No. of employees ...	187	635,607	100,904	44,875	16,932	26,263	5,220	660	147	830,795
Inc. or dec. ...	+1	-897	-251	+348	-54	-33		6		-718

### 1. BRITISH TRANSPORT COMMISSION TRAFFIC RECEIPTS

	Four weeks		Inc. or dec.	Aggregate for twenty-eight weeks		Inc. or dec.
	To July 17, 1949	To July 11, 1948		1949	1948	
	£000	£000	£000	£000	£000	£000
<b>British Railways</b> ...						
Passengers ...	11,433	11,325	108	58,324	63,152	-4,828
Parcels, etc., by passenger train ...	2,343	2,374	31	15,289	15,536	-247
Merchandise ...	5,956	6,144	-188	44,531	45,730	-1,199
Minerals ...	2,203	2,226	-23	16,085	15,429	+656
Coal & coke ...	5,374	5,145	+229	37,265	35,166	+2,099
Livestock ...	43	44	-1	615	476	+139
	27,352	27,258	+94	172,109	175,489	-3,380
<b>Steamships</b> ...	1,168	1,016	+152	4,871	4,403	+468
<b>London Transport</b> ...						
Railways ...	1,074	1,088	-14	7,794	7,854	-60
Buses & coaches ...	2,494	2,438	+56	16,843	16,870	-27
Trams & trolleybuses ...	846	857	-11	5,905	6,050	-145
	4,414	4,383	+31	30,542	30,774	-232
<b>British Road Services</b> ...						
Freight charges, etc. ...	2,762			13,137		
<b>Inland Waterways</b> ...	139	123	+16	1,058	933	+125
<b>Hotels &amp; Catering</b> ...	1,082	1,064	+18	6,927	6,948	-21

Regions. A slight decline in minerals was offset by an increase in ton miles.

Train mileage was up by 5.76 per cent., as compared with 7.4 per cent. in June, the Western Region having the largest increase. Freight train speed dropped to 8.68 m.p.h., due chiefly to slower movement in the London Midland Region. For the first time this year, the consumption of locomotive coal was less than 60 lb. per engine mile.

Inland Waterways report lighter traffic, though its North Eastern Division was busy. London Transport had 4,790,000 more passengers by bus or coach, but 500,000 fewer by rail, in spite of 167,000 additional railway-car miles being run.

**WESTERN REGION LONDON LECTURE & DEBATING SOCIETY.**—The first meeting of British Railways, Western Region, London Lecture & Debating Society, 1949-50 session, will be held on October 6, in the Clerks' Dining Club, Bishop's Bridge Road, Paddington, at 5.45 p.m. On this occasion, Sir Cyril Hurcomb, Chairman, British Transport Commission, will read a paper entitled "Transport as an Integrated Public Service."

### 2. BRITISH RAILWAYS

#### (A) Passenger Journeys Originating in the Month of May

	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Ordinary fares ...	1,014,000 (-28.46)	617,000 (-26.58)	1,934,000 (-12.37)	996,000 (-9.27)	126,000 (-39.54)	254,000 (-38.65)	4,941,000 (-20.12)
Monthly return ...	3,566,000 (-44.03)	1,484,000 (-50.50)	6,386,000 (-33.17)	3,135,000 (-31.90)	336,000 (-67.01)	806,000 (-40.16)	15,713,000 (-39.32)
Excursion, weekend, cheap day, etc. ...	3,837,000 (-96.51)	1,750,000 (-121.69)	3,495,000 (-308.01)	1,046,000 (-137.66)	919,000 (-118.69)	1,265,000 (-436.91)	12,312,000 (-162.26)
Workmen ...	5,865,000 (-7.63)	1,780,000 (-1.78)	6,650,000 (-7.65)	3,626,000 (-4.69)	939,000 (-2.78)	935,000 (-6.88)	19,795,000 (-5.18)
Other descriptions ...	1,168,000 (-22.95)	779,000 (-27.74)	1,418,000 (-19.16)	667,000 (-25.51)	262,000 (-37.20)	405,000 (-26.65)	4,699,000 (-24.37)
Season tickets ...	3,745,000 (-1.32)	2,235,000 (-1.65)	10,276,000 (-20.04)	4,022,000 (-15.07)	568,000 (-5.81)	1,379,000 (-16.61)	22,225,000 (-9.98)
Total ...	19,195,000 (-5.92)	8,645,000 (-11.03)	30,159,000 (-3.60)	13,492,000 (-3.60)	3,150,000 (-12.03)	5,044,000 (-3.12)	79,685,000 (-2.84)

#### (B) Freight Tonnage Originating

	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Merchandise ...	1,309,000 (-4.10)	748,000 (-0.62)	285,000 (-6.97)	539,000 (-8.36)	528,000 (-5.85)	562,000 (-3.64)	3,971,000 (-1.35)
Minerals ...	1,584,000 (-2.12)	691,000 (-5.02)	112,000 (-2.80)	716,000 (-0.93)	843,000 (-2.40)	692,000 (-6.48)	4,638,000 (-0.12)
Coal & coke ...	4,230,000 (-6.00)	2,042,000 (-1.56)	299,000 (-3.96)	2,176,000 (-7.27)	2,488,000 (-5.15)	1,563,000 (-2.66)	12,798,000 (-4.14)
Livestock ...	13,000 (-37.76)	9,000 (-5.26)	2,000 (-13.64)	3,000 (-10.26)	4,000 (-45.83)	13,000 (-55.81)	44,000 (-23.08)
Total ...	7,136,000 (-2.19)	3,490,000 (-0.29)	698,000 (-3.95)	3,434,000 (-6.03)	3,863,000 (-2.93)	2,830,000 (-0.60)	21,451,000 (-2.18)



## (C) Net Ton Miles

	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Merchandise & livestock ...	181,654,000 (-3.53)	98,179,000 (-2.95)	24,173,000 (+2.66)	72,251,000 (+1.01)	50,238,000 (+8.46)	75,148,000 (-2.73)	501,643,000 (-1.27)
Minerals ...	137,914,000 (+5.95)	76,694,000 (+4.08)	14,131,000 (+5.81)	78,513,000 (-13.00)	33,402,000 (-0.81)	40,295,000 (-2.98)	380,949,000 (+0.18)
Coal & coke ...	312,277,000 (+7.13)	142,616,000 (+11.81)	31,512,000 (+16.25)	182,277,000 (-0.70)	69,285,000 (-4.26)	66,543,000 (-1.09)	804,510,000 (+4.92)
Total all classes of traffic ...	631,845,000 (-3.59)	317,489,000 (+4.99)	69,816,000 (+9.08)	333,041,000 (-2.84)	152,925,000 (-0.37)	181,986,000 (-0.92)	1,687,102,000 (+1.93)

## (D) Train Miles

	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Coaching train miles—							
Steam—							
Loaded ...	4,575,000 (-4.55)	3,258,000 (-13.40)	1,697,000 (+9.98)	2,905,000 (+12.38)	1,109,000 (-5.61)	1,986,000 (+6.06)	15,530,000 (+8.60)
Empty ...	160,000 (+7.08)	160,000 (-10.16)	71,000 (-26.68)	117,000 (-17.57)	55,000 (-12.62)	77,000 (+6.79)	640,000 (+12.05)
Total, loaded & empty ...	4,735,000 (+4.64)	3,418,000 (-13.24)	1,768,000 (-10.56)	3,022,000 (-12.57)	1,164,000 (-5.92)	2,063,000 (-6.08)	16,170,000 (+8.74)
Electric—							
Loaded ...	459,000 (+4.18)		3,008,000 (+9.51)	21,000 (-0.88)	98,000 (-6.19)		3,586,000 (+8.65)
Empty ...	19,000 (-2.61)		76,000 (+7.83)	2,000 (-22.56)	10,000 (-4.12)		107,000 (+4.80)
Total, loaded & empty ...	478,000 (+3.88)		3,084,000 (+9.47)	23,000 (-2.50)	108,000 (-5.15)		3,693,000 (+8.53)
Freight train miles—							
Loaded ...	3,004,000 (-0.70)	1,767,000 (-8.89)	531,000 (-0.75)	1,676,000 (-0.80)	912,000 (-0.77)	1,358,000 (-2.98)	9,248,000 (-0.62)
Empty ...	550,000 (-1.54)	205,000 (-0.76)	18,000 (-30.31)	369,000 (-9.92)	215,000 (-9.13)	204,000 (-9.02)	1,561,000 (+1.64)
Total, loaded & empty ...	3,554,000 (-0.83)	1,972,000 (-7.80)	549,000 (-0.05)	2,045,000 (-0.98)	1,127,000 (-0.97)	1,562,000 (-3.81)	10,809,000 (-0.76)
Total train miles...	8,767,000 (-2.31)	5,390,000 (-11.19)	5,401,000 (+8.78)	5,090,000 (+7.56)	2,399,000 (-3.50)	3,625,000 (+1.58)	30,672,000 (+5.76)

## (E) Freight Train Miles per Train Hour

		Region						Total	
		London Midland	Western	Southern	Eastern	North Eastern	Scottish		
1949	1948	1949	1948	1949	1948	1949	1948	1949	1948
7.38	7.62	9.53	9.49	8.86	8.86	8.61	8.35	10.90	10.57
								10.17	10.28
								8.68	8.71

## (F) Locomotive Coal Consumption

	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Tonnage consumed ...	340,000 (-2.88)	176,000 (-4.86)	80,000 (+7.68)	195,000 (-3.57)	88,000 (-0.92)	164,000 (-3.01)	1,043,000 (-0.89)
Lb. per engine mile ...	60.76 (-4.54)	49.65 (-4.11)	53.94 (-1.93)	60.45 (-6.68)	59.21 (-2.21)	67.50 (-3.39)	58.71 (-4.43)

## (G) Rolling Stock Position

	Operating stock	Number under repair	Serviceable stock	Serviceable stock in 1948
Locomotives ...	20,004	3,420	16,176	16,363
Coaching vehicles ...	55,823	4,629	51,194	49,673
Freight wagons ...	1,147,413	127,220	1,020,193	1,052,316

## 3. INLAND WATERWAYS

## Tonnage of traffic and ton miles

	Tonnage	Per cent.	Ton miles	Per cent.
General merchandise ...	282,000	(-8.95)	4,792,000	(-14.20)
Liquids in bulk ...	109,000	(-10.10)	3,005,000	(+11.66)
Coal, coke, patent fuel & peat ...	432,000	(-0.20)	6,597,000	(+2.45)
Total ...	823,000	(-4.73)	14,394,000	(-2.18)

## 4. LONDON TRANSPORT

## (A) Passenger Journeys Originating

	Number	Per cent.
Railways ...	47,377,000	(-1.04)
Buses & coaches ...	215,915,000	(+2.27)
Trams & trolleybuses ...	91,484,000	(-0.91)
Total ...	354,776,000	(+0.98)

## (B) Rail and Road Car Miles

	Miles	Per cent.
Railways ...	17,941,000	(+0.93)
Buses & coaches ...	24,407,000	(+0.43)
Trams & trolleybuses ...	8,633,000	(-1.36)
Total ...	50,981,000	(+0.30)

## Ministry of Transport Accident Report

*Between Cowden and Hever on the Southern Region, British Railways: December 7, 1948*

Mr. J. L. M. Moore, Railway Employment Inspector, Ministry of Transport, inquired into the accident which occurred to Southern Region Class I.3 4-4-2 tank engine No. 2028 at about 11.30 a.m. on December 7, 1948, when it was about half way through Mark Beech tunnel, between Cowden and Hever stations, running light from Tunbridge Wells to New Cross. A large smoke tube collapsed, filling the cab with steam and flames. The driver, who was opposite the fire hole at the moment, closed the regulator and had his face, arms and legs badly scalded. The fireman escaped injury. The engine was stopped before they had to leave the footplate. As conditions shortly after improved, the driver decided to proceed forward by gravity, and before reaching the end of the tunnel the engine was met by a ganger who, having heard it stop, was going to ascertain the cause. He suggested letting the engine run on to Edenbridge, where there would be better facilities for dealing with the driver's injuries, and this was done. At Edenbridge an ambulance, summoned by a message dispatched by the ganger through a lengthman, arrived, and the driver was in hospital within half an hour of the accident, which reflects credit on all concerned.

The engine was being sent to New Cross for minor mechanical repairs, and had run nearly 87,000 miles since May 17, 1945, after general repairs at Brighton. It was still in fairly good order. A district boiler inspector had examined it on October 4, 1948, and reported that the copper ends and heads of the large tubes were wearing thin. As a result of his one recommendation the ferrules were renewed. A boiler-smith, since retired, made the fortnightly examination of the firebox at Tunbridge Wells the day before the accident, but made no comments. He was regarded as thoroughly reliable, with 45 years experience of boilerwork.

The tube which failed was second from the right in the middle row. It was of steel, 4½ in. outside diameter, with a copper portion, some 10 in. long, brazed on to the firebox end. The fracture extended round one-third of the circumference close to the brazing, and was due to corrosion on the water side. It was one of a complete set of 21 new large tubes fitted during the last general repair, when a new copper firebox was provided. When the rest were drawn, practically all were found to be badly corroded circumferentially near the brazing, and several collapsed while being removed. In addition there was an unusual amount of pitting further along most of the tubes. The small tubes were also drawn, but were found to be in good condition, having been renewed in November, 1947.

The Chief Chemist, C.M.E. Department, Southern Region, analysed the tube, and after comparing it favourably with the specification, concluded that "there is nothing abnormal in the composition of the steel, which is of good quality." This was only to be expected, as it was clear from the condition of the other large tubes that the corrosion was not restricted to the tube which failed, but was common to the set. It was therefore thought desirable to investigate whether other engines of the same class, doing more or less the same work, were similarly affected. The entire set of large tubes was accordingly

drawn from engines 2022 and 2027, which had run 84,532 and 69,674 miles respectively since their last general repair; in addition, three large and seven small tubes were drawn at random for examination from all the other engines of the same class, irrespective of work or location.

Mr. Moore inspected the two sets at Eastleigh and found that on engine No. 2022 (new large tubes fitted in January, 1945) the steel was slightly wasted, due to corrosion near the copper ends, with occasional pitting further along some of the tubes, but in the opinion of the boiler shop foreman they could have remained in service another eighteen months or two years. On engine No. 2027 (a set of secondhand large tubes, with new copper ends, fitted in November, 1945) the tubes were in good condition, with practically no corrosion or pitting. Secondhand tubes are generally those taken from boilers of greater length, which enables the brazed ends, where corrosion is most likely to occur due to electrolytic action, to be cut off before being used a second time. The tubes had therefore been in service for probably eight or nine years at least.

Mr. Moore himself did not inspect the tubes taken from other engines, but was informed that they were in reasonably good condition. It was not considered necessary to have any more drawn. It became evident that the conditions leading to this accident were peculiar to engine No. 2028, one of eleven of the class stationed at Tunbridge Wells and normally maintained on more or less the same work. Since May, 1948, however, this engine had been subjected to anti-foam trials by Imperial Chemical Industries, which, on being notified of the failure, wrote to the Chief Mechanical Engineer, Southern Region: "We also confirm the view of your own staff, namely, that these anti-foam materials cannot, because of their nature, have caused the 'necking' which led to the rapid failure of the superheater tube of this locomotive. The active ingredient in these anti-foams consists of a small percentage of organic materials, for example, polyamides. British Patents Nos. 568,318 and 568,510 describe a number of these materials. As you may know from published information, anti-foam materials of the above types are extensively used by the American railways, apparently without ill effects. You have also been using anti-foam materials supplied by us for several years, for example, at Ramsgate and Horsham, without trouble."

### INSPECTOR'S CONCLUSION

While the actual test chemicals may not have affected the tubes, the trials probably had a bearing on the accident, as the engine was restricted to a special turn of duty for the time being, introducing water conditions differing in important respects from those applicable to the other Tunbridge Wells engines of the same class. The water taken by these engines as a whole may be regarded as non-corrosive, with the exception of that at Three Bridges, which has a high amount of dissolved carbon dioxide associated with a high iron content, and is, on that account, detrimental to steel. There are only two daily turns which take the Tunbridge Wells I.3 class engines to Three Bridges, and normally they would be worked by all the engines in rotation. Throughout the trial

period, however, engine No. 2028 was kept exclusively on one of these turns, which included nearly an hour's wait at Three Bridges twice daily, and as the water there is popular with enginemen, in view of its anti-priming properties, every opportunity was probably taken to replenish the tanks with it.

Mr. Moore does not suggest, however, that the heavy corrosion was due solely to the Three Bridges water, but inclines to the view that it began at an early stage after the engine left the works, due to conditions not now traceable. This led to the comparatively early renewal of the small tubes after 2½ years service, but left its effect on the large tubes and rendered them particularly susceptible to the corrosive nature of the Three Bridges water during the last few months, when it was taken regularly in fairly large quantities.

Failure of a large tube in traffic appears almost without precedent. Seldom does one become sufficiently thin to develop "pin holes," the usual warning given by small tubes. The district boiler inspector, with 10 years' service in that capacity after 35 as a running shed boiler-smith, could recall one instance of a pin hole in a large tube. The failure, Mr. Moore considers, may be regarded as exceptional, and that, in the light of experience, all reasonable precautions were taken. It has, however, revealed possibilities, and the method of examining these tubes should be reviewed. Unless a reliable means can be found for determining their condition without disturbing them, sampling may have to be resorted to more freely in future. In that connection the behaviour of the small tubes ought to be a useful guide, and should be studied more closely. While these suggestions are intended to discover corroded tubes before any harm results, the desirability of extending the installation of water treatment plants where necessary, to prevent such corrosion as far as possible, should not be overlooked.

**FOUNDRY RESEARCH.**—A research team to advise on the operating efficiency of foundries is to be set up by the ironfounding employers in conjunction with the British Cast Iron Research Association and the Council of Ironfoundry Associations. The team will be available to visit any foundry by invitation.

**TRANSPORT IN TANGANYIKA AND THE WATER SHORTAGE.**—To augment the supply of tank vehicles required in Tanganyika to cope with the water lift, which was referred to on page 332 last week, urgent orders have been placed in Great Britain for 20 tanks, each having a capacity of 15,000 gal. The first of these is due for shipment now, and if the schedule of delivery is carried out, there should be a considerable increase in water supplies in the drought areas from early November. Railways in Tanganyika are now carrying daily 70,000 gal. of fresh water to Tabora, and many villages and railway camps along the Central line at 10-mile intervals are officially described as being in a serious plight. In spite of heavily increasing demands made on the railway as a result of the prolonged drought, the Tanganyika railways recently broke all records for tonnages carried over the Central line, for, apart from normal traffic, commitments include the monthly movement of famine-relief maize from Kenya via Kisumu and Mwanza of 1,700 tons plus approximately 2,500 tons monthly through the Dar-es-Salaam Dodoma area.

## Staff & Labour Matters

### Railway Wage Claim

There has so far been no indication by the National Union of Railwaymen that it is arranging to give effect to the recommendations of the Board of Conciliation in regard to rates of pay and conditions of service of salaried and conciliation staff, despite the stipulation in the terms of reference to the Board, which were accepted by all parties, that "failing settlement on any point, the Board would make recommendations which the parties agree beforehand to accept."

Meanwhile, there is considerable unrest and a feeling of resentment on the part of a good many railway workers because of the rejection by the Board of Conciliation of the wage claim for 10s. a week increase and enhanced payment for all time worked after noon on Saturdays.

Manchester and Salford Joint Goods & Cartage Committee of the N.U.R. on September 13 passed a resolution expressing a "deep sense of injustice" at the recommendation in connection with the wage claim, but no action is considered likely until the Special Delegate Conference of the N.U.R. has taken place in London on September 29 and 30.

On September 14, the London Transport Executive met representatives of the N.U.R., A.S.L.E. & F., and R.C.A. to consider the claim made by the N.U.R. for an increase of 10s. a week for all rail staff and for extra payment for time worked after noon on Saturdays. The next day a similar meeting was held with the Docks & Inland Waterways Executive. Both Executives followed the lead given by the Conciliation Board and declined the claims. London Transport did not repeat the offer made at an earlier meeting to give a moderate increase to certain lower-paid staff, and the situation is similar to that in the Railway Executive, as the Conciliation Board has not supported the Railway Executive offer, made in the early stages of the negotiations with the unions, which would have given an increase of 3s. a week to the man on the lowest rate with a gradual tapering towards the higher ranges.

The Executive of the N.U.R. has decided to make application to the Docks & Inland Waterways Executive for the introduction of the subsidiary claims, which have been settled between the N.U.R. and the Railway Executive at the recent Conciliation Board, and also in respect of the three subsidiary items on which agreement was not reached at the Board, but which were the subject of recommendations by the Board, and as such are binding upon the parties.

Dundee Branch of the N.U.R. at a meeting on September 14 adopted a resolution in favour of strike action by the union to enforce the wage claim. All branches of the N.U.R. throughout the country are urged to take part in a 24-hr. token strike on September 24 and to end overtime until the wage claim is met. The resolution, which was carried by 108 votes to 7, read:—

"This meeting of the Dundee Branch of the N.U.R. completely rejects the findings of the Conciliation Board. We believe the first duty of any industry is to pay a living wage to its workers, and considering £33,000,000 per annum is being paid to former shareholders, we see no reason why the 10s. wage increase cannot be met. Consequently we decide:—

"(1) To mandate our delegate to the special general meeting of the N.U.R. to move for strike action to enforce the 10s. wage claim.

"(2) As an indication of our determination, we call on all Dundee railwaymen for a token stoppage of work on Saturday, September 24, i.e., no turn of duty to be worked after 12.01 a.m. We call on all branches of the N.U.R. in Britain to support the Saturday token stoppage on September 24 to show our determination to win our wage claim.

"(3) We ask all our members to cease working overtime, such practice to commence after September 18 and to continue until our wage claim is met."

Staff at Warrington Bank Quay are continuing in their policy of go-slow working in protest at the findings on the main wages claim, and a certain amount of congestion and interference with tram working has resulted.

Members of the N.U.R. at Southampton Docks decided at a special meeting of No. 3 Branch on September 16 to adopt a work-to-rule policy as from midnight on September 19 until midnight on September 25, and also to refuse to work overtime. This action was called for as an "expression of disgust" at the rejection of the N.U.R. wage claim. [900 men began go-slow working as from midnight on September 19.]

The N.U.R., in an attempt to persuade its members to refrain from unconstitutional action, has sent out a circular letter to all branches throughout the country appealing to the men to carry out normal working until the whole question of the wages issue can be discussed at the Special Delegate Conference on September 29 and 30.

It is understood that the Executive Committee of the N.U.R. has instructed the General Secretary to advise the Minister of Labour that the claim in respect of railway shopmen will be submitted to the Railway Shopmen's National Council, which is in accordance with the recommendation of the Board of Conciliation. Before the matter can be discussed by the Council, it will be necessary for the Confederation of Shipbuilding & Engineering Unions, who represent certain shopmen in the railway service, to take similar action.

A curious position has now arisen in view of the decision announced on September 16 that the General Council of the Confederation of Shipbuilding & Engineering Unions proposes to press for a general increase of £1 a week in the pay of its constituents. The Confederation, which embraces 37 unions, of which the largest is the A.E.U., has as members of its constituent unions a number of railway shopmen working alongside members of the N.U.R. employed in railway workshops.

At a meeting on September 18, Wigan Nos. 1 and 4 Branches of the N.U.R. together with Hindley Branch decided unanimously to commence go-slow working as from 12.1 a.m. on September 20. The resolution which was adopted stated that only the rostered number of hours will be performed during the week and that overtime and working on rest days will not operate. This policy will be continued until September 25.

A mass meeting of London railwaymen on the night of September 19 decided by a large majority to begin working to rule from midnight on September 21. This decision would affect men employed on the main lines and suburban and underground lines. The resolution adopted by the meeting was in accordance with the terms of the recommendation drafted by the London District Council of the N.U.R. last week. The meeting rejected an amendment to the main resolution which

would have prohibited all overtime and confined work strictly to the 44-hr. week. The supporters of the amendment recommended prohibition of overtime because the Railway Executive had included overtime when quoting the earnings of railwaymen before the Conciliation Board. The meeting also agreed that an approach should be made to the London organisation of the other two railway unions, the R.C.A. and the A.S.L.E. & F., in order to enlist the support of their members.

A poster message urging railway depot staffs to continue working normally is now displayed on station notice boards at all British Railways stations and depots.

### BRITISH RAILWAYS IMPORTANT MESSAGE TO THE CONCILIATION STAFF

1. The Trade Unions and the Railway Executive agreed beforehand to accept the recommendations of the recent Conciliation Board on wages set up by the Minister of Labour. The Railway Executive are putting into force the recommendations which will cost £850,000 per annum.
  2. There have been indications that at certain depots members of the staff are ignoring the fact of their Unions' agreement and are contemplating unconstitutional action by refusing to work normally.
  3. From past experience this would mean that regular senders of traffic will be forced to use other means of transport. Some of the traffic so diverted may be lost to British Railways for ever.
  4. The results must be—  
LESS TRAFFIC  
LESS RECEIPTS  
LESS MONEY FOR WAGES  
LESS STAFF REQUIRED  
LESS OPPORTUNITIES FOR PROMOTION
  5. British Railways will only succeed if there is team spirit and the honouring of agreements. This means the utmost co-operation between staff and management at all levels and the settlement of grievances by the fullest use of the negotiating machinery whilst the job goes on.
- THINK OF YOUR FUTURE  
LIVELIHOOD

A demand for a minimum wage of £5 10s. a week for all workers was made in a resolution which was passed at a meeting on September 18 of the Aberdeen branch of the N.U.R. Whilst acknowledging acceptance of the Conciliation Board decision, the resolution stated that the branch decisively rejected the view that 55 per cent. of their union members with a wage of less than £5 had to continue in that impoverished state until the railway industry was established on a paying basis, a view which meant in effect a continued subsidisation of the industry by a section of the poorest workers. The branch requested the Special General Meeting called by the Executive Committee of the N.U.R. to pass a resolution demanding a minimum wage of £5 10s. for all adult workers, and to use the influence of the Executive Committee to secure whatever Government subsidy might be forthcoming to allow the demand to be met.

The following resolution was carried on September 18 by the Sheffield Area Council of the N.U.R.:—

"That this district council express its



disgust at the Conciliation's Board's rejection of the union claim for 10s. per week increase, and recognises that it has no alternative but to use the only power it now possesses. We, therefore, decide to recommend to a mass meeting in Sheffield next Sunday, that a work-to-rule policy be adopted, to take effect immediately after the mass meeting, and further to consider every appropriate means to bring about a successful conclusion of our claim."

At a meeting of the N.U.R. members at Southampton Docks on the evening of September 20, it was decided to call off go-slow working and to resume normal working as from midnight, September 20.

Officials of the R.C.A. and A.S.L.E. & F. have intimated that their members would be asked to carry on normal working if the N.U.R. members in London decide to act on their threat of working to rule as from midnight, September 21. A representative of the Transport & General Workers' Union has stated that London busmen would perform their normal duties in the event of the railway men working to rule, but no more buses would be run, and additional passengers would not be carried.

A claim for an increase in pay of 10s. a week submitted last July on behalf of 70,000 Central London bus, tram, and trolleybus workers is not being pursued. The Transport & General Workers' Union has announced that a sick-pay scheme is being pressed instead of the wages claim. One reason for the change in front is said to be the failure of the railwaymen's claim, and the union is also waiting until the T.U.C. makes clear the policy which it proposes to follow as a result of the devaluation of the pound.

On September 21 other railway men decided against working to rule, including those at a number of London depots.

## Notes and News

**Vickers Limited Dividend.**—The directors of Vickers, Limited, give notice that an interim dividend of 2 per cent. actual, less income tax, on the ordinary stock of the company, in respect of the year 1949, will be paid on October 25 next.

**Sailing Tickets to Ireland.**—The Belfast Steamship Company has announced that sailing tickets are no longer required for travel to or from Liverpool. Under present arrangements, the daily service (Sundays excepted) between Belfast and Liverpool, in both directions, will be maintained during the winter months.

**Closing of Stations, L.M.R.**—The London Midland Region announces that the following stations will be closed to passengers and passenger train traffic on September 26: Sankey Bridges, near Warrington; Red Rock, between Chorley and Wigan, via Boars Head; and Lowton, between Kenyon Junction and Golborne. It is also announced that Dunhampstead Goods Station, near Worcester, will be closed to all traffic on October 1; and that it has been decided not to reopen Stansfield Hall Station (Tadmorden), which was closed temporarily on July 31, 1944.

**Waterloo Engine Naming Ceremony.**—The naming ceremony of the new Southern Region "Merchant Navy" class engine *Brocklebank Line* took place at Waterloo Station on September 20. The ceremony was performed by Colonel Denis H. Bates, Chairman of Thos. & Jno. Brocklebank Limited, who was accompanied by Mr. A. Rigby Hughes, Director & General Manager. The engine is one of the third series of "Merchant Navy" class engines built by the Southern Region to the design of Mr. O. V. Bulleid, Chief Mechanical Engineer, and carries a replica of the house

flag in enamel within a circle on which the name of the Brocklebank Line appears. Mr. R. P. Biddle, Docks & Marine Manager, Southern Region, presided, and other Southern Region officers present included Mr. S. W. Smart, Superintendent of Operation, Mr. E. A. W. Turbett, Assistant Chief Mechanical Engineer, Mr. T. E. Chrimes, Motive Power Superintendent, and Mr. C. Grasemann, Public Relations & Publicity Officer.

**Van Dogs to Reduce Pilferage.**—To counter pilferage, and because van boys are scarce, specially-trained van dogs are being used by British Road Services Unit Carter Paterson. Since the introduction of the first six dogs, there have been only two minor attempts to interfere with packages from the rear of vehicles, both of which failed. So successful is the innovation that more dogs are being trained as quickly as possible.

**Belgium to Sell Railway Goods to Spain.**—A Reuter report from Brussels states that the Belgian Foreign Minister has promised Belgian metal workers that the Government will facilitate the purchase of Belgian railway equipment by Spain. A delegation of metal workers had complained of the high rate of unemployment in Belgian plants engaged in producing railway material. They asked the Government to reconsider accepting Spanish orders for such goods. These orders until now have been refused.

**International Travel Conference at Luxembourg.**—The representatives of 31 countries and 13 organisations concerned with tourism, together with many special observers, are taking part in the fourth international conference of National Travel Organisations, which opened on September 20 at Luxembourg. The prin-

### Southern Region Locomotive named "Brocklebank Line"



Left: Colonel Denis H. Bates, Chairman of Thos. & Jno. Brocklebank Limited, shaking hands with the driver and fireman of the Southern Region "Merchant Navy" class locomotive which he named "Brocklebank Line" at Waterloo on September 20. Right: Colonel Bates unveiling the nameplate; on the left is Mr. R. P. Biddle, Docks & Marine Manager, Southern Region (see paragraph above)

## OFFICIAL NOTICES

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

**FERODO LIMITED** require Mechanical Plastics Technical Representative, London, Home Counties. State age, qualifications, salary.—Apply Manager, London North or South Depots.

**SECTIONED PERSPECTIVE VIEW OF LOCOMOTIVE FRONT END.** A notable drawing of L.M.S.R. class "7P" 4-6-2 locomotive of the latest type. Reprinted from *The Railway Gazette*, June 15, 1945. Price 2s. 6d. Post free 2s. 8d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**RAILWAY SIGNALLING AND COMMUNICATIONS INSTALLATION AND MAINTENANCE.** A practical guide, especially intended to help Signal Inspectors, Installers, Fitters, Linemen, Draughtsmen, and all concerned with installing and maintaining Signal, Telegraph, and Telephone Equipment. 416 pp. Many illustrations. Cloth. 8s. By post 8s. 6d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**BRITISH WORK ON PERSIAN RAILWAYS.** The achievements and difficulties of the R.E.S. during the 15 months in which they laid the foundation for effective aid to Russia. Reprinted from *The Railway Gazette*, February 2 and 16, 1945. Price 1s. Post free 1s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**STATION DESIGN.** A striking example of modern British practice at the important wayside station of Luton. Reprinted from *The Railway Gazette*, July 7, 1944. Price 1s. Post free 1s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**THE "PAGET" LOCOMOTIVE.** Hitherto unpublished details of Sir Cecil Paget's heroic experiments. Eight single-acting cylinders with rotary valves. An application of the principles of the Willans central-valve engine to the steam locomotive. By James Clayton, M.B.E., M.I.Mech.E. Reprinted from *The Railway Gazette*, November 2, 1945. Price 2s. Post free 2s. 3d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**THE EVOLUTION OF RAILWAYS.** Second edition, revised and enlarged. By Charles E. Lee. Traces the germ of railways back to Babylonian times. Cloth. 8½ in. by 5½ in. 72 pp. Illustrated. 6s. By post 6s. 4d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

**RAILWAY STORE METHODS.** By W. H. Jarvis. Great Western Railway. The necessity for training officers—Organisation of stores department—Stores accounts. Cloth. 7½ in. by 5 in. 116 pp. With diagrams. 4s. By post 4s. 3d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

Principal subjects for discussion are the reports presented by Mr. Ernest W. Wimble, President of the International Union of Official Travel Organisations, and by the Chairmen of the Regional and Technical Commissions set up within the framework of the Union.

**Liquid Steel Temperature Measurement.**—British work in liquid steel temperature measurement by the quick-immersion thermocouple technique will be the subject of a paper to be presented at the forthcoming seventh annual conference on electric furnace steel to be held by the American Institute of Mining & Mechanical Engineers in Pittsburgh. Members of the British Steel Founders' Association have provided the author of the paper, Mr. J. F. B. Jackson, of David Brown & Sons (Huddersfield) Limited, with data indicating the extent to which quick immersion pyrometry is applied in the British steel castings industry.

**Westinghouse Brakes in Australia.**—The last of an order for 50 four-wheel trolleybus chassis, built by the Sunbeam Trolleybus Co. Ltd. for the Western Australian Government Tramways & Ferries, has just been shipped to Australia, where the bodies will be built. All these chassis are equipped with Westinghouse air brake equipment. This contract is the largest single order for trolleybus chassis for Australia placed in this country so far, and it is anticipated that the first vehicles will be in service in Perth towards the end of the year. Westinghouse air brakes incorporating the E.10 compressor are also fitted on the thirty Sunbeam trolleybus chassis which are in the process of being shipped to Australia for service in Adelaide.

**Nitrate Railways Results.**—In his statement circulated with the report and accounts of the Nitrate Railways Co. Ltd., Mr. P. L. Fleming, Chairman, said that the sale of assets in Chile to the Compañía Salitrera de Tarapacá y Antofagasta had not yet been approved by the Chilean Government, nor had the Government implemented any of its proposals to take over the railway and pay compensation. They had agreed with the C.S.T.A., therefore, to carry all its traffic in Tarapacá Province at the normal tariffs, while their own operating costs were fully guaranteed. This had enabled the company to run at a profit in the current year. When running at a loss, while drawing an income from their investments, they could recover the tax deducted from that income, though now that they were running the railway at a profit, they would not be able to reclaim tax, and the directors did

not consider that so much capital should be kept invested. Mr. Fleming then referred to the scheme for repayment outlined in *The Railway Gazette* of September 9, and pointed out that this would still leave sufficient funds to provide an income while the company tried to dispose finally of its property. Special resolutions regarding repayment and alterations in the articles were passed at a subsequent extraordinary meeting.

**Saunders Valve Company Results.**—At a board meeting of the Saunders Valve Co. Ltd. on September 15 it was agreed to recommend a final dividend of 10 per cent. less income tax, making, with the interim dividend of 6 per cent. less income tax a total distribution for the year to April 30, 1949, of 16 per cent., against 5 per cent. for four months. The profit of the company and its subsidiary for the year to April 30 amounted to £86,791, against £85,327; current taxation absorbs £49,675, against £48,300, £13,325, against £8,700, has been transferred to reserve for future taxation, and the net profit of the subsidiary company retained therein is £1,203. Dividend absorbs £22,000, against £6,875, leaving £6,339.

**Dairy Herd Moved by Rail.**—On Monday, September 5, a bull, nineteen cows, nineteen heifers and thirteen calves from the Sutherlandshire Dalchork dairy herd of pedigree Ayrshire cattle moved to a new home at Mulgrave Castle, Whitby, Yorkshire. The fifty-two head of cattle were transported in two stages, first by road from Dalchork to Lairg Station and then by express freight train to Hinderwell Station, some five hundred miles distant. This work could not be commenced until the late afternoon, so as to fit in with feeding and milking times, and the train journey from Lairg started at 5 p.m. Arrangements were made for a special stop to be made *en route*, also for feeding and milking, and the herd reached its destination on the following afternoon.

**British Railways Police Dogs.**—A demonstration by the first specially trained railway police dogs was given recently at Sighthill Goods Station, Glasgow, before Mr. T. F. Cameron, Chief Regional Officer, Scottish Region. The dogs, which are to patrol with railway police officers as protection against attacks by thieves, returned recently from an intensive training course at Hull. They will be stationed at depots throughout the country where raids have been taking place. Mr. G. E. Beynon, Chief of Police, Scottish Region, said that in recent months gangs of thieves had forced open locked vans at St. Rollox and Robroyston sidings. On eight occa-

sions they had been disturbed by railway policemen, whom they attacked and injured with crowbars and other weapons. He added that during the first six months of 1949 British Railways had paid out claims in Scotland amounting to £89,259. The greatest losses were from whisky and tobacco vans.

**Tube Investments Subsidiaries in South Africa.**—Tube Investments Limited announces the formation of a new subsidiary, Tube Investments South Africa (Pty.) Ltd., to assist generally in the promotion of the business interests of its subsidiary companies in that country. Major-General Sir Francis de Guingand has been appointed resident Chairman & Managing Director of the company. Tube Investments also announces the acquisition of the factory, plant, and equipment of the Ace Cycle & Engineering Co. Ltd., Springs, Johannesburg. This resulted from an offer made by the Chairman of Tube Investments, Mr. I. A. R. Stedford, during a recent visit to South Africa, on behalf of a further subsidiary, Tube Investments Cycles (South Africa) Limited, then in formation.

**Aldershot & District Traction.**—Presiding at the recent annual general meeting of the Aldershot & District Traction Co. Ltd., whose results for the past year were given in our August 19 issue, the Chairman, Mr. W. T. James, said that the local consultative committees proposed in the Area Scheme for North-Eastern England were sheer window-dressing designed to encourage the idea that regard would be had to local needs. There was no attempt to explain the need for wholesale disruption of an efficiently run industry. The suggested power of the Area Board to eliminate unnecessary competition was a serious threat to public freedom of choice between road and rail. It might be their own turn next to be nationalised, and should that happen, he was sure the public they served would exercise their right of making their views known.

**Locomotive named "Lord Massereene."**—The long association which Viscount Massereene & Ferrard has had with the L.M.S.R. (Northern Counties Committee) was marked at a ceremony at York Road Station, Belfast, on September 8, when locomotive No. 101 was named *Lord Massereene*. For more than 30 years a member of the directorate of the Northern Counties Committee, Lord Massereene was Chairman during the last few years before the undertaking was merged in the Ulster Transport Authority; since the setting up of the Authority in 1948, he has been a member of the board of

that organisation. The 2-6-0 locomotive No. 101 had previously been in service and had undergone a general overhaul and been repainted in the new U.T.A. livery for engines. Major Pope, Chairman of the U.T.A., who was accompanied by Mr. R. P. C. Gotto, Sir Dudley McCorkell, and Mr. W. A. Edmenson, Members of the U.T.A., Mr. A. Morrison, Chief Officer (Special Duties) and Mr. J. W. Hutton, Chief Traffic Manager, met Lord Massereene at No. 2 platform, where the engine crew were introduced to him. After the proceedings had been opened by Mr. Hutton, Lord Massereene unveiled the nameplate and presented souvenirs of the occasion to Driver J. McAuley and Fireman W. J. McCahon.

**Agreed Charges.**—Applications for the approval of 233 further agreed charges under the provisions of section 37 of the Road & Rail Traffic Act, 1933, have been lodged with the Transport Tribunal. Notices of objection must be lodged on or before October 11 next.

**Ericsson Telephones and Pye Agreement.**—An agreement has been signed between Ericsson Telephones Limited, London, and Beeston & Pye Limited, Cambridge, whereby foreseeing a great future for multi-channel V.H.F. telephone links, these two companies will pool their technical, engineering, and marketing resources in an effort to capture valuable world markets.

**De La Rue & Co. Ltd.**—Mr. B. C. Westall, Chairman & Managing Director of Thomas De La Rue & Co. Ltd., whose results were recorded in our July 29 issue, stated at the annual meeting on September 14 that market conditions had deteriorated for De La Rue Insulation Limited as for many other plastic manufacturers. Formica sales had increased steadily, however, and continued to do so; that side of the business should contribute to profits as its products became better known. Their gas division had worked on a very restricted programme of gas water heaters and the working for the year showed a substantial loss. They had embarked on this business some four years ago with the encouragement of the Government, which was then anxious to encourage industry in the Newcastle area, but the crushing purchase tax imposed a year later showed how the Government implemented its promise of encouragement.

### Forthcoming Meetings

September 24 (Sat.).—British Railways, Southern Region, Lecture & Debating Society. Visit to London Airport, Heath Row.

September 25 (Sun.) and 26 (Mon.).—Railway Students' Association, London School of Economics & Political Science. Visit to British Railways, Southern Region, Quarry at Okehampton.

October 1 (Sat.).—British Railways, Southern Region, Lecture & Debating Society. Visit to National Physical Laboratory, Teddington.

October 1 (Sat.).—Permanent Way Institution, London Section. Inspection of Liverpool Street-Shenfield electrification scheme.

October 3 (Mon.).—Society of Engineers, in the apartments of the Geological Society, Burlington House, London, W., at 5.30 p.m. "Scientists v. Engineers," by Mr. G. Constantinesco.

## Railway Stock Market

A big advance in gold mining shares and a general rise in commodity and base metal mining shares were the chief reactions of stock markets to devaluation. Industrials were marked up on a wide front with gains of up to 4s. in shares of companies with important interests and trade in the United States. British Funds, however, showed declines of £2 and there was an easier trend in all classes of fixed-interest securities. Devaluation had been regarded as inevitable, sooner or later, but first news of the outcome of the Washington talks had given the impression that the Government might have postponed its decision for the time being. Nevertheless, towards the end of last week industrial shares had resumed their upward trend, and the further large gains in share values reflects the fact that the £ has been devalued more heavily than had been generally expected. This should give a big stimulus to exports to dollar countries, but to obtain the same amount of dollars as formerly it will be necessary to sell a much larger volume of goods to the U.S.A., while the fact that other European countries have followed the lead of sterling may also mean that competition for export business to America will be keener than ever. Realisation of this caused buying of industrial shares to become more selective.

The fall in British Funds, which naturally has been reflected by 3 per cent. Transport and other nationalisation stocks, is due to the fact that the prospect of an increase in the cost of living means that income from fixed interest-bearing securities will be worth less in terms of goods than formerly. Recognition of this has led to a certain amount of switching from fixed interest into equity or industrial shares which offer scope for capital appreciation and prospects of higher dividends when the limitation request is removed.

Foreign rails have been more active. Canadian Pacific advanced with dollar stocks, gaining \$3½ at \$24, while Manila Railway "A" debentures were marked up three points to 89, and the preference shares jumped 1s. 9d. at 9s. Chilean Northern Railway Bonds were 1½ higher at 29½. Also, helped by the higher traffic

rates, Peru Corporation debentures have improved to 37½, and the preference stock strengthened to 4½. United of Havana stocks were prominent and were marked up sharply after the announcement that negotiations are in progress and asking stockholders to await a further statement. The 1906 debentures advanced to 20½, their highest for a long time, while the preference stock improved to 4½ and the Cuban Central debentures jumped 5 points to 38½. Havana Terminal debentures were 56. Because of their dollar option clause, National Railway of Mexico stocks were prominent, the 6 per cents. rising to 28½, and the 4½ per cents. to 18. Brazil rails have been more active, although it is realised that the devaluation of sterling will not affect the compensation to be paid for the railways. Great Western of Brazil shares remained firm at 14½. Leopoldina stocks have been inclined to improve on the view that current market prices are likely to prove to be below their share-out valuations. The ordinary were active around 9½, the preference 29, the 4½ per cent. debentures 92½, and the 6½ per cent. debentures 137. Leopoldina Terminal 5 per cent. debentures were 109 and the ordinary units 3s. 7½d. Antofagasta kept their former trend, with the ordinary being 7½ and the preference 39½, while Beira Railway bearer shares were again 50s. 6d.

Road Transport and bus shares were firm generally, with B.E.T. strong at £1,680, the latter having responded to the general buoyant trend of markets. Southdown were 118s. 9d., West Riding 75s., and Lancashire Transport 80s., but Scottish Motor showed small fluctuations around 88s. 3d.

Iron and steel shares continued their better trend. Stewarts and Lloyds rose to 54s. 3d., Dorman Long were 31s. 6d., United Steel 27s. 4½d., and John Summers 31s. 9d., while Firth Brown at 72s. 6d. were more than 3s. higher on balance. Locomotive building and engineering shares continued their better tendency, Vulcan Foundry being 20s. 6d., North British Locomotive 21s. 3d., and Beyer, Peacock 19s. 7½d., while Gloucester Wagon jumped to 47s. 6d. accompanied by a revival of talk of a possible part return of capital. At the time of writing Wagon Repairs 5s. shares have remained at 17s.

### Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week		No. of week	Aggregate traffics to date			
				Total this year	Inc. or dec. compared with 1947/48		Total	Increase or decrease		
							1948,49			
South & Central America				£	£		£			
	Antofagasta...	811	11.9.49	48,890	—	5,190	36	2,396,990	+	443,870
	Costa Rica ...	281	July, 1949	35,287	—	6,345	4	35,287	—	6,345
	Dorada ...	70	July, 1949	29,403	—	4,063	30	200,008	+	24,342
	G.W. of Brazil ...	1,083	21.5.49	19,200	—	10,600	20	755,800	+	1,200
	Inter. Ctl. Amer. ...	794	July, 1949	\$987,286	—	\$119,300	30	\$7,577,801	+	\$594,919
	La Guaira ...	22½	Aug., 1949	\$107,606	—	\$11,830	35	\$859,223	+	\$21,889
	Leopoldina ...	1,902	28.5.49	43,288	—	3,864	21	965,094	+	155,382
	Nitrate ...	382	15.9.49	19,046	—	3,250	37	321,595	+	103,783
	Paraguay Cent. ...	274	9.9.49	\$149,985	—	\$44,896	10	\$1,417,684	+	\$377,640
South & Central America	Peru Corp. ...	1,059	Aug., 1949	246,670	—	74,521	9	4,732,214	+	122,033
	Salvador ...	100	May, 1949	c94,000	—	c9,000	48	c1,884,000	—	c6,600
	Taltal ...	154	Aug., 1949	9,335	—	3,840	9	19,995	+	4,490
	United of Havana ...	1,301	11.6.49	\$231,311	—	\$14,746	49	\$13,733,928	—	\$4,659,951
	Canada									
Canadian National...		23,473	July, 1949	10,351,250	—	99,000	30	69,544,750	+	1,978,500
Canada	Canadian Pacific ...	17,037	July, 1949	7,312,750	—	141,500	30	51,121,750	+	3,460,000
	Various									
Barsi Light*		202	Aug., 1949	21,465	+	735	21	155,467	+	20,730
Beira ...		204	Feb., 1949	104,917	—	6,180	22	589,461	+	9,141
Egyptian Delta ...		607	20.7.49	15,912	—	298	16	200,006	+	5,374
Gold Coast ...		536	July, 1949	227,818	+	27,301	18	933,447	+	72,357
Mid. of W. Australia ...		277	July, 1949	20,862	—	3,125	4	20,862	—	3,125
Nigeria ...		1,900	June, 1949	436,929	+	33,791	12	1,282,367	—	9,925
South Africa ...		13,347	20.8.49	1,520,015	—	184,283	33	30,013,556	+	3,309,005
Various	Victoria ...	4,744	May, 1949	1,513,772	—	65,626	48	—	—	—

\* Receipts are calculated at 1s. 6d. to the rupee